STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING							FORI		
APPLICATION FOR PERMIT TO DRILL						1. WELL NAME and NUMBER NBU 1022-03P4T			
2. TYPE OF WORK DRILL NEW WELL (REENTER P8	A WELL DEEPE	N WELL ()			3. FIELD OR WILDO	CAT NATURAL BUTTES		
4. TYPE OF WELL		ed Methane Well: NO				5. UNIT or COMMUI	NITIZATION AGREE	MENT NAME	
6. NAME OF OPERATOR		GAS ONSHORE, L.P.				7. OPERATOR PHON			
8. ADDRESS OF OPERATOR P.O	. Box 173779, D	enver, CO, 80217				9. OPERATOR E-MA	IL ondragon@anadarko	.com	
10. MINERAL LEASE NUMBER		11. MINERAL OWNE	RSHIP	_	_	12. SURFACE OWNI			
(FEDERAL, INDIAN, OR STATE) UTU-01191-A		FEDERAL (IND)	IAN 🗍 STATE (FEE		FEDERAL 📵 INI	DIAN 🗍 STATE (FEE (III)	
13. NAME OF SURFACE OWNER (if box 12	= 'fee')					14. SURFACE OWNI	ER PHONE (if box 1	2 = 'fee')	
15. ADDRESS OF SURFACE OWNER (if box	12 = 'fee')					16. SURFACE OWNI	ER E-MAIL (if box 1	.2 = 'fee')	
17. INDIAN ALLOTTEE OR TRIBE NAME		18. INTEND TO COM		TION FROM	м	19. SLANT			
(if box 12 = 'INDIAN')			ommingling Applicat	ion) NO		VERTICAL DIRECTIONAL HORIZONTAL			
20. LOCATION OF WELL	FO	OTAGES	QTR-QTR	SECT	ION	TOWNSHIP	RANGE	MERIDIAN	
LOCATION AT SURFACE	559 F	SL 659 FEL	SESE	3		10.0 S	22.0 E	S	
Top of Uppermost Producing Zone	559 F	SL 659 FEL	SESE	3		10.0 S	22.0 E	S	
At Total Depth	559 F	FSL 659 FEL SESE 3				10.0 S	22.0 E	S	
21. COUNTY UINTAH		22. DISTANCE TO NE	EAREST LEASE LIN 559	IE (Feet)		23. NUMBER OF AC	RES IN DRILLING U	JNIT	
		25. DISTANCE TO NE (Applied For Drilling		SAME POO	L	26. PROPOSED DEPTH MD: 8600 TVD: 0			
27. ELEVATION - GROUND LEVEL 5074		28. BOND NUMBER	WYB-000291			29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE Permit #43-8496			
		АТ	TTACHMENTS						
VERIFY THE FOLLOWING	ARE ATTACH	ED IN ACCORCANO	CE WITH THE U	TAH OIL	AND G	GAS CONSERVATION	ON GENERAL RU	LES	
WELL PLAT OR MAP PREPARED BY	LICENSED SUR	VEYOR OR ENGINEER	COM	IPLETE DR	RILLING	G PLAN			
AFFIDAVIT OF STATUS OF SURFACE	OWNER AGRE	EMENT (IF FEE SURFA	ACE) FORI	M 5. IF OP	ERATO	R IS OTHER THAN TI	HE LEASE OWNER		
DRILLED) DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY TOPOGRAPHICAL I				CAL MAI	P				
NAME Raleen White	TITLE Sr. Regulatory Analyst PHOP			PHON	HONE 720 929-6666				
SIGNATURE DATE 12/22/2008 Ef			EMAI	L raleen.white@anada	rko.com				
API NUMBER ASSIGNED 43047501730000	AF	PPROVAL		`	Bod	o gill			
					Perm	nit Manager			

Proposed Hole, Casing, and Cement									
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)					
Surf	12.25	9.625	0	2000					
Pipe	Grade	Length	Weight						
	Grade J-55 LT&C	2000	36.0						
	Cement Interval	Top (MD)	Bottom (MD)						
		0	2000						
		Cement Description	Class	Sacks	Yield	Weight			
			Premium Foamed Cement	315	1.18	15.6			

Proposed Hole, Casing, and Cement									
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)					
Prod	7.875	4.5	0	8600					
Pipe	Grade	Length	Weight						
	Grade I-80 LT&C	8600	11.6						
	Cement Interval	Top (MD)	Bottom (MD)						
		0	8600						
		Cement Description	Class	Sacks	Yield	Weight			
			Premium Lite High Strength	400	3.38	11.8			
			Pozzuolanic Cement	1390	1.31	14.3			

Kerr-McGee Oil & Gas Onshore LP NBU #1022-03P4T SECTION 3, T10S, R22E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 11.2 MILES ON THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 8.9 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST: TURN LEFT AND PROCEED IN AN NORTHEASTERLY DIRECTION APPROXIMATELY 3.9 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTH; TURN LEFT AND PROCEED IN A NORTHERLY DIRECTION APPROXIMATELY 1.0 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN RIGHT AND PROCEED IN AN NORHTEASTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 1.9 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST: SOUTHWESTERLY. **TURN RIGHT AND PROCEED** IN A SOUTHEASTERLY DIRECTION APPROXIMATELY 0.4 MILES TO THE EXISTING WELL #37X AND THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 58.3 MILES.

Kerr McGee Oil & Gas Onshore LP

NBU #1022-03P4T

LOCATED IN UINTAH COUNTY, UTAH SECTION 3, T10S, R22E, S.L.B.&M.

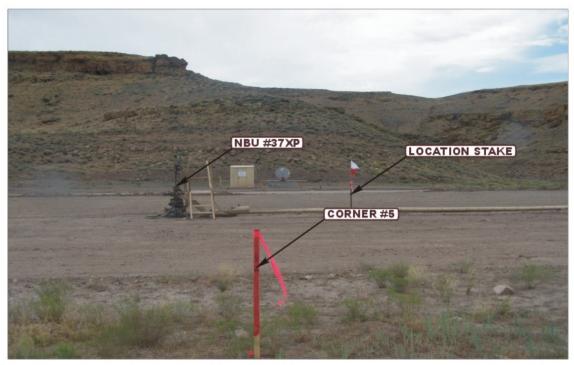


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: WESTERLY

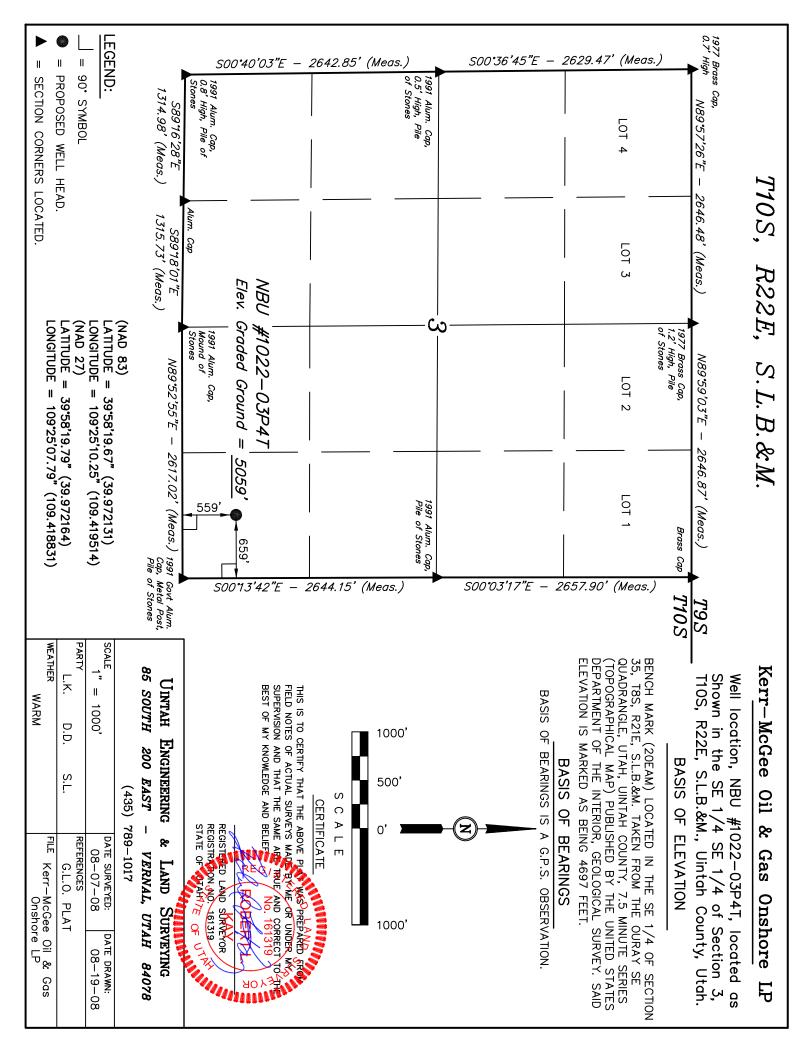


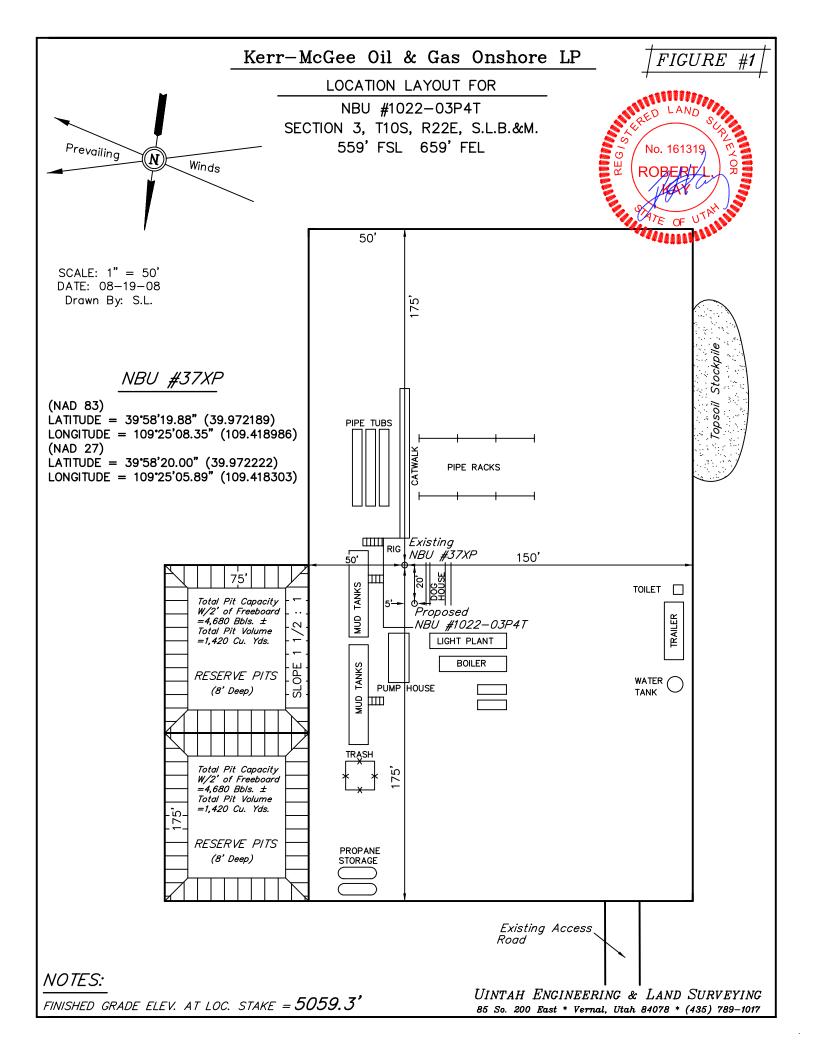
PHOTO: VIEW OF EXISTING ACCESS

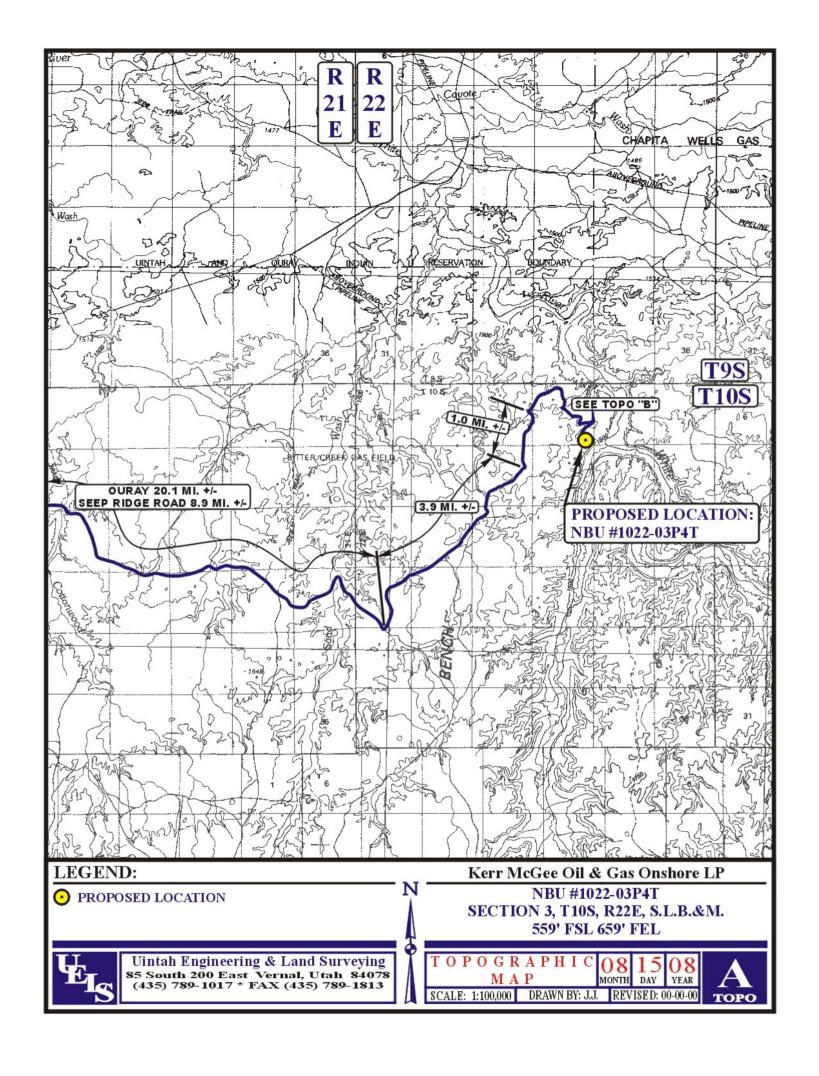
CAMERA ANGLE: SOUTHEASTERLY

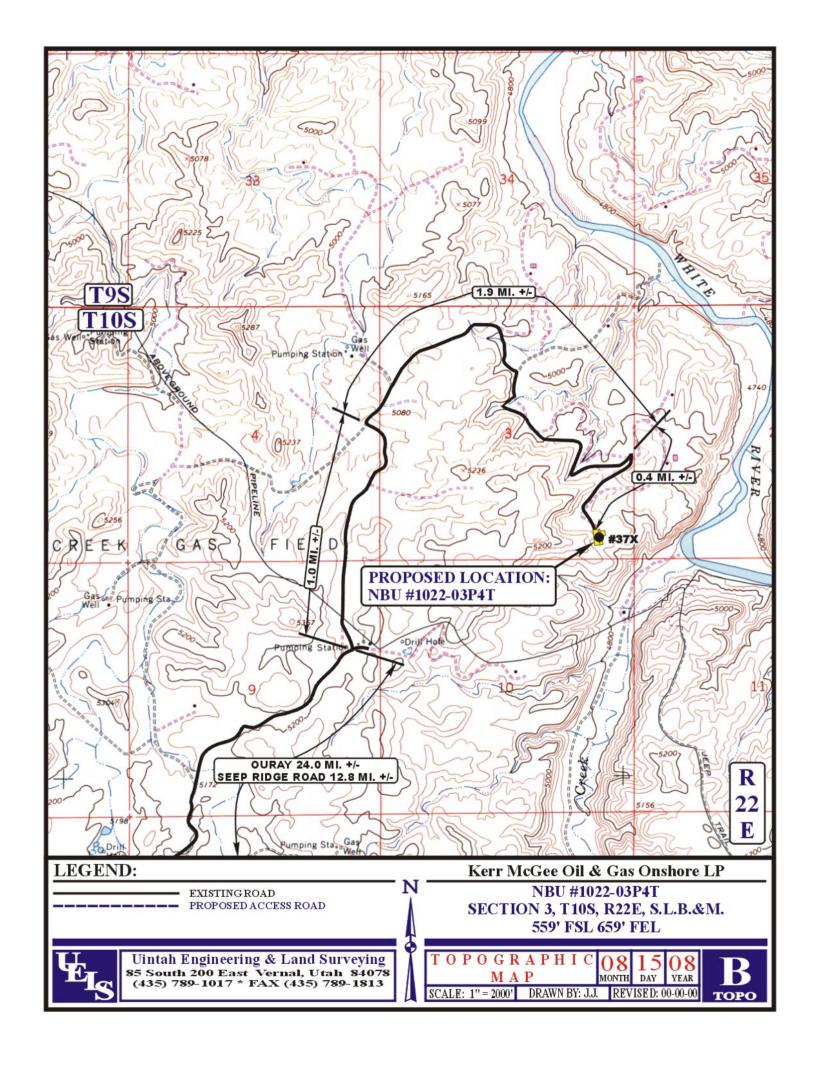


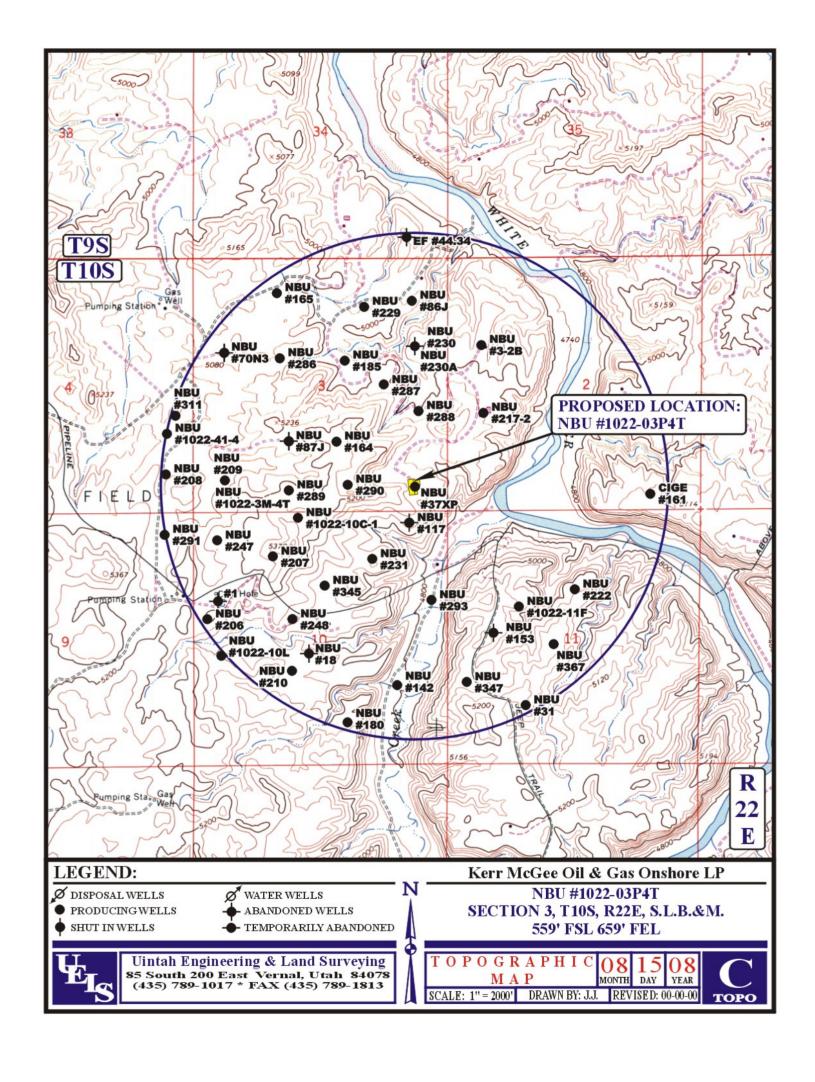
LOCATION	08 MONTH	15 DAY	08 YEAR	рното	
TAKEN BY: L.K.	DRAWN BY: J.J.	REV	ISED: 0	0-00-00	











NBU 1022-03P4T SESE Sec. 3, T10S,R22E UINTAH COUNTY, UTAH UTU-01191-A

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. <u>Estimated Tops of Important Geologic Markers</u>:

<u>Formation</u>	<u>Depth</u>
Uinta	0- Surface
Green River	1064'
Bird's Nest	1358'
Mahogany	1862'
Wasatch	4154'
Mesaverde	6489'
MVU2	7444'
MVL1	8035'
TD	8600'

2. Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:

Substance	Formation	<u>Depth</u>
	Green River	1064'
	Bird's Nest	1358'
	Mahogany	1862'
Gas	Wasatch	4154'
Gas	Mesaverde	6489'
Gas	MVU2	7444'
Gas	MVL1	8035'
Water	N/A	
Other Minerals	N/A	

3. <u>Pressure Control Equipment</u> (Schematic Attached)

Please see the Natural Buttes Unit Standard Operating Procedure (SOP).

4. Proposed Casing & Cementing Program:

Please see the Natural Buttes Unit SOP.

5. <u>Drilling Fluids Program</u>:

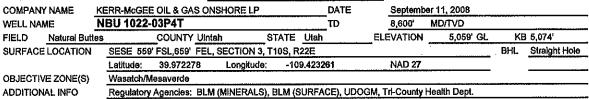
Please see the Natural Buttes Unit SOP.

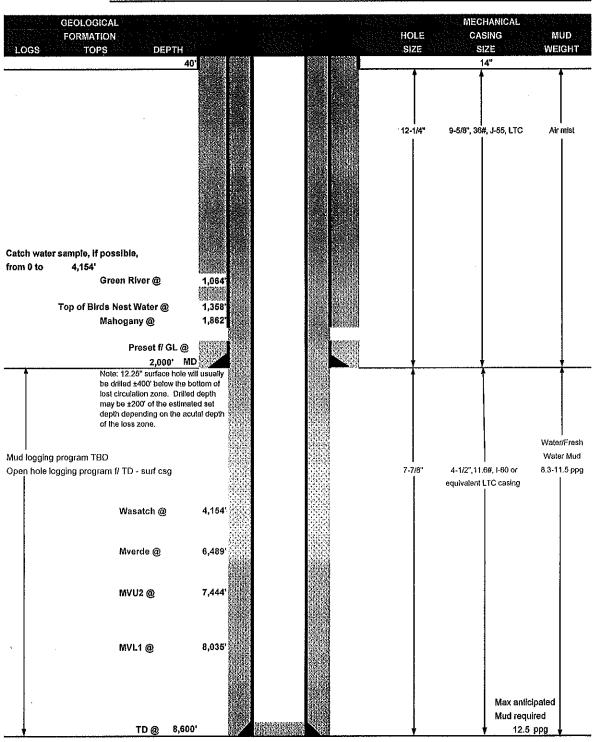
6. Evaluation Program:

Please see the Natural Buttes Unit SOP.



KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM







KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM

CASING PROGRAM

•						:	L. L	DESIGN FACT	ORS
	SIZE	INTERV	AL	WT.	GR.	CPLG.	BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'							
							3520	2020	453000
SURFACE	9-5/8*	0 to	2,000'	36.00	J-55	LTC	0.95	2,16	7.18
						ALCOHOL:	⊘7780 ≫	6380 sie	201000
PRODUCTION	4-1/2"	0 to	8600	11.60	I-80	LTC	2.10	1.14	2.31
	0.0000000000000000000000000000000000000			Mark I				COMMO	

¹⁾ Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psl/ft-partial evac gradient x TVD of next csg point)

2) MASP (Prod Casing) = Pore Pressure at TD - (.22 psi/ft-partial evac gradient x TD)

(Burst Assumptions: TD =

12.5 ppg)

,22 psl/ft = gradient for partially evac wellbore

(Collapse Assumption: Fully Evacuated Casing, Max MW)

(Tension Assumptions: Air Weight of Casing*Buoy,Fact. of water)

4320 psi

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500	Premium cmt + 2% CaCl	215	60%	15.60	1.18
Option 1		0.0000000000000000000000000000000000000	± 25 pps flocele				
	TOP OUT CMT (1)	250	20 gals sodium sliicate + Premlum cmt	100		15.60	1,18
			+ 2% CaCl + 25 pps flocele				Bessell state.
	TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
SURFACE			NOTE: If well will circulate water to surface	o option 2	will be util	zed .	
Option 2	LEAD	2000	Prem cmt + 16% Gel + 10 pps gilsonite	230	35%	11,00	3.82
			+25 pps Flocele + 3% sall BWCC			000000000000000000000000000000000000000	建约 多2000
	TAIL	500	Premium cmt + 2% CaCl	180	35%	15.60	1.18
			+;25 pps flocele				## 4500 E
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
		100 M					
PRODUCTIO	N LEAD	3,650'	Premium Lite II + 3% KCI + 0.25 pps	400	60%	11.80	3.38
		\$1.56 Sec. 1	celloflake + 5 pps gilsonite + 10% gel		藝術学	60,3507.53	
			+ 0.5% extender				
		949750001	Gradus Administration		表 學。	- APPROXIMATE.	
	TAIL	4,950'	50/50 Poz/G + 10% salt + 2% gel	1390	60%	14.30	1.31
			+.1% R-3		100000		

^{*}Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.					
	Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint to top of tail cement with bow spring centralizers.					

ADDITIONAL INFORMATION

	BOPE: 11" 5M with one annular and 2 rams. Test to 5,000 psi (annular to 2,500 psi) prior to drilling out. Record on chart recorder &							
	tour sheet. Function test rams on each trip. Maintain safety valve & inside BOP on rig floor at all times. Ketly to be equipped with upper							
·	& lower kelly valves.							
	Drop Totco surveys every 2000'. Maximum allowable hole angle is 5 degrees.							
	Most rigs have PVT Systems for mud monitoring. If no PVT is available, visual monitoring will be utilized.							
LINO	ENGINEED.			DATE:				
ING	ENGINEER:	Dead Lane.		DATE				
	OUDEDINITENDENT:	Brad Laney		DATE:				
LING	SUPERINTENDENT:			DATE:				
		Randy Bayne	NIDLE 4000 CODAT					

NBU 1022-03P4T

^{*}Substitute caliper hote volume plus 10% excess for TAIL if accurate caliper is obtained

NBU 1022-03P4T SESE SEC 03 ,T10S,R22E UINTAH COUNTY, UTAH UTU-01191-A

ONSHORE ORDER NO. 1

MULTI-POINT SURFACE USE & OPERATIONS PLAN

1. Existing Roads:

Refer to the attached location directions.

Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

2. Planned Access Roads:

No new access road is planned, as this is a twin location. Refer to Topo Map B.

Existence of pipelines; maximum grade; turnouts; major cut and fills, culverts, or bridges; gates, cattle guards, fence cuts, or modifications to existing facilities were determined at the on-site.

Please see the Natural Buttes Unit Standard Operating Procedure (SOP).

3. Location of Existing Wells Within a 1-Mile Radius:

Please refer to Topo Map C.

4. Location of Existing & Proposed Facilities:

Utilizing existing pipeline

Please see the Natural Buttes Unit SOP.

Variances to Best Management Practices (BMPs) Requested:

All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The requested color is Shadow Grey a non-reflective earthtone.

Interim Surface Reclamation Plan:

This exception is requested due to the current twin and multi-well program. If determined that this well will not be a candidate for either twinning &/or multi-well the operator shall spread the topsoil pile on the location up to the rig anchor points. The location will be reshaped to the

original contour to the extent possible. The operator will reseed the area using the BLM recommended seed mixture and reclamation methods.

5. Location and Type of Water Supply:

Please see the Natural Buttes SOP.

6. Source of Construction Materials:

Please see the Natural Buttes SOP.

7. Methods of Handling Waste Materials:

Please see the Natural Buttes SOP.

A plastic reinforced liner is to be used. It will be a minimum of 20 mil thick and felt, with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash or scrap that could puncture the liner will be disposed of in the pit.

Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to one of the pre-approved disposal sites: RNI, Sec. 5, T9S, R22E, NBU #159, Sec. 35, T9S R21E, Ace Oilfield, Sec. 2, T6S, R20E, MC&MC, Sec. 12, T6S, R19E, Pipeline Facility Sec. 36, T9S, R20E, Goat Pasture Evaporation Pond SW/4 Sec. 16, T10S, R22E, Bonanza Evaporation Pond Sec. 2, T10S, R23E (Request is in lieu of filing Form 3160-5, after initial production).

8. Ancillary Facilities:

Please see the Natural Buttes SOP.

9. Well Site Layout: (See Location Layout Diagram)

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills, and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram to describe rig orientation, parking areas, and access roads.

Location size may change prior to the drilling of the well due to the current rig availability. If the proposed location is not large enough to accommodate the drilling rig. The location will be resurveyed and a form 3160-5 will be submitted.

10. Plans for Reclamation of the Surface:

Please see the Natural Buttes SOP.

11. Surface/Mineral Ownership:

The well pad, access road and pipeline are located on lands owned by:

United States of America Bureau of Land Management 170 South 500 East Vernal, UT 84078 (435)781-4400

12. Other Information:

A Class III archaeological survey, T&E Clearance and a paleontological survey have been performed and will be submitted.

This location is not within 460' from the boundary of the Natural Buttes Unit, nor is it within 460' of any non-committed tract lying within the boundaries of the Unit.

13. Lessee's or Operator's Representative & Certification:

Raleen White Sr. Regulatory Analyst Kerr-McGee Oil & Gas Onshore LP P.O. Box 173779 Denver, CO 80217-3779 (720) 929-6666 Randy Bayne Drilling Manager Kerr-McGee Oil & Gas Onshore LP 1368 South 1200 East Vernal, UT 84078 (435) 781-7018

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under the terms and conditions of the lease for the operations conducted upon leased lands.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided Bureau of Land Management Nationwide Bond #WYB000291.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by the Operator, its contractors, and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Raleen White 9/11/2008
Date

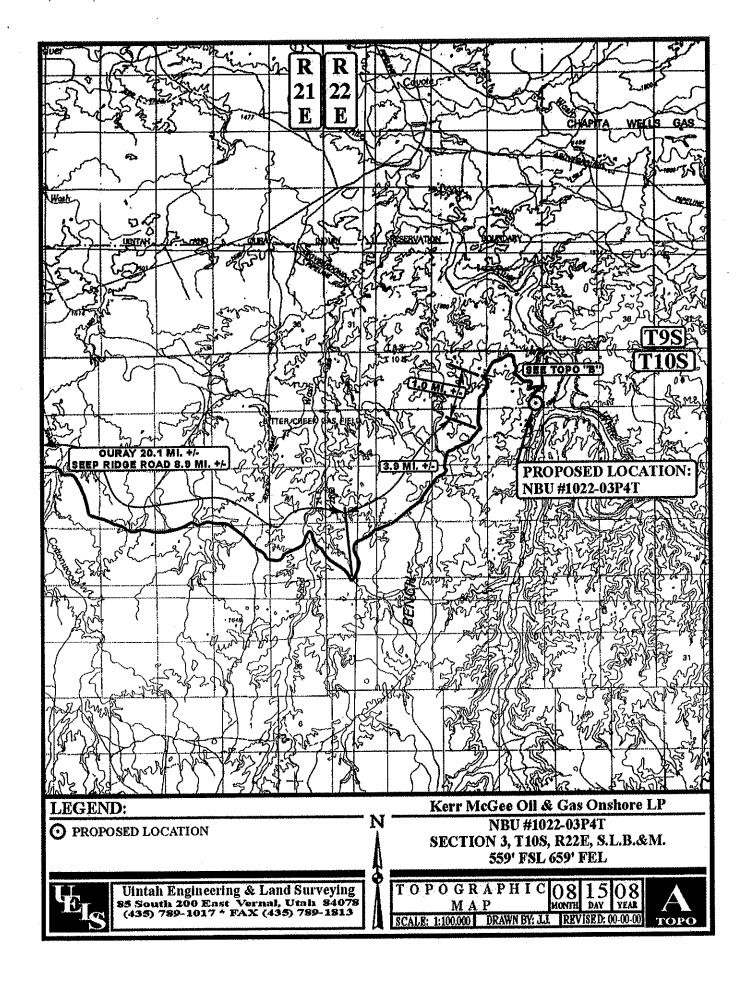
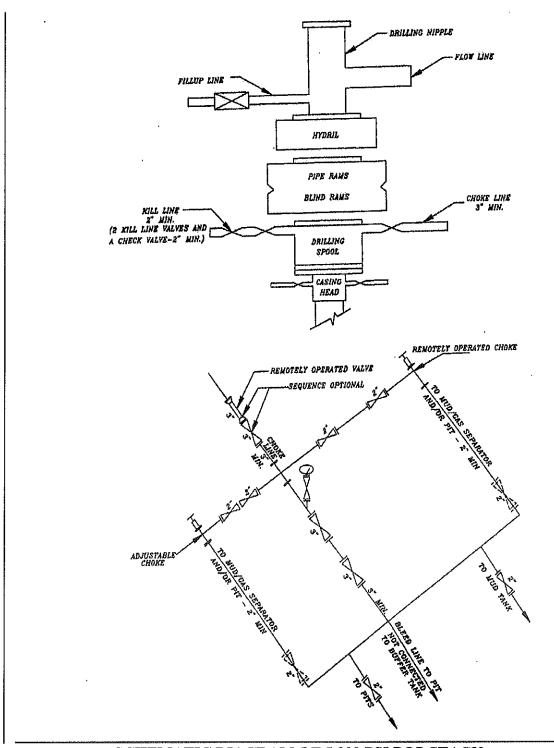


EXHIBIT A



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

Kerr-McGee Oil & Gas Onshore LP NBU #1022-03P4T SECTION 3, T10S, R22E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88: EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 11.2 MILES ON THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 8.9 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST: TURN LEFT AND PROCEED IN AN NORTHEASTERLY DIRECTION APPROXIMATELY 3.9 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTH: TURN LEFT AND PROCEED IN A NORTHERLY DIRECTION APPROXIMATELY 1.0 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN RIGHT AND PROCEED IN AN NORHTEASTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 1.9 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST: TURN RIGHT AND PROCEED SOUTHWESTERLY. INA SOUTHEASTERLY DIRECTION APPROXIMATELY 0.4 MILES TO THE EXISTING WELL #37X AND THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 58.3 MILES.

Kerr McGee Oil & Gas Onshore LP

NBU #1022-03P4T LOCATED IN UINTAH COUNTY, UTAH SECTION 3, T10S, R22E, S.L.B.&M.

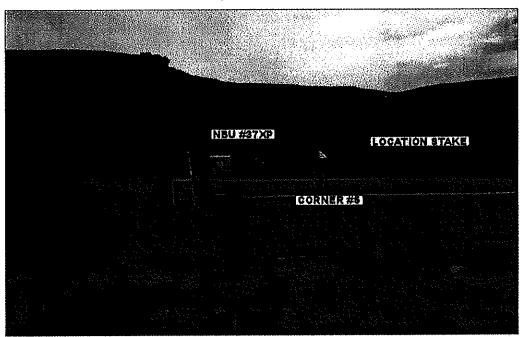


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: WESTERLY



PHOTO: VIEW OF EXISTING ACCESS

CAMERA ANGLE: SOUTHEASTERLY



Uintah Engineering & Land Surveying

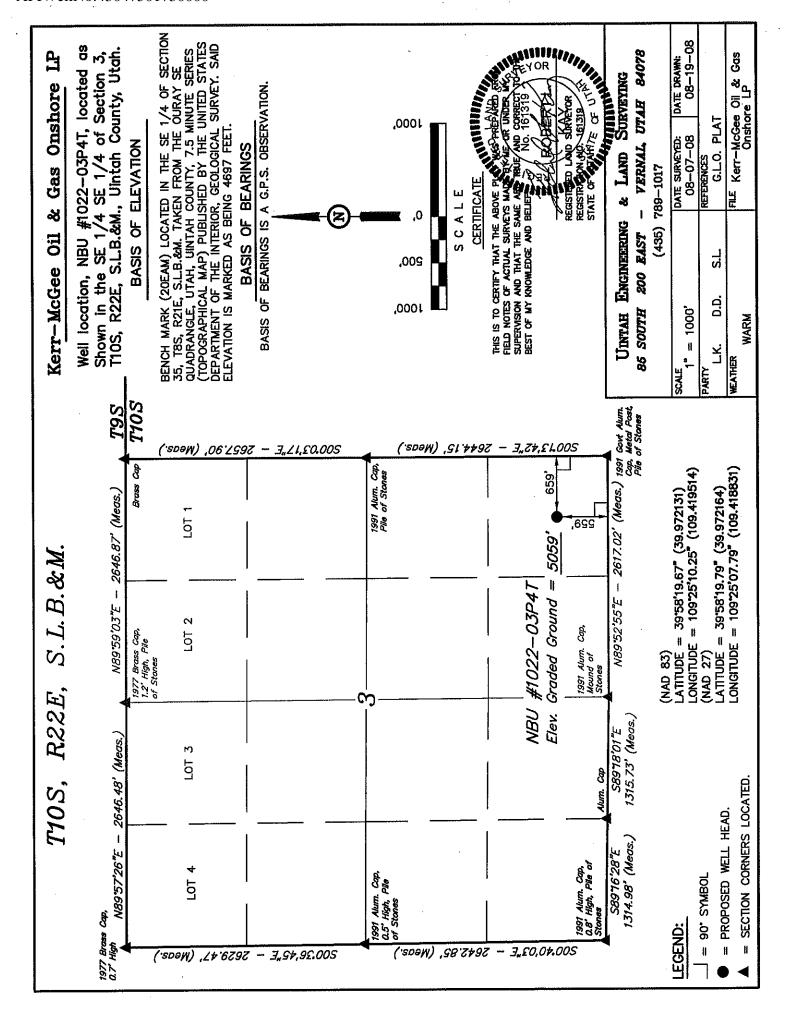
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

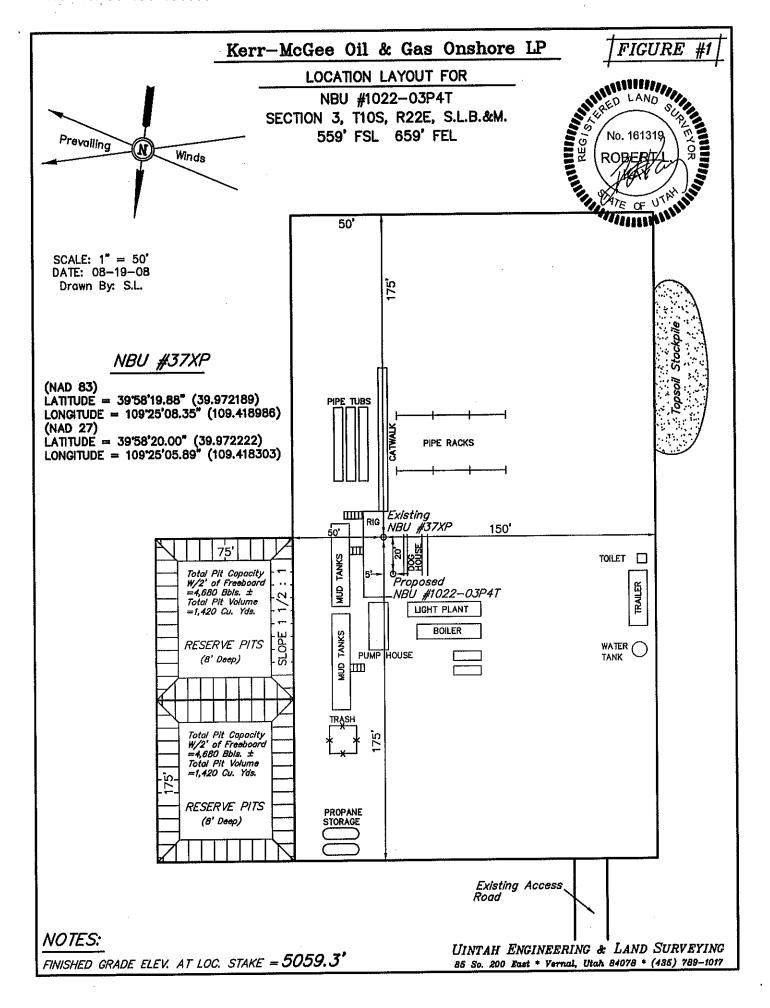
LOCATION PHOTOS

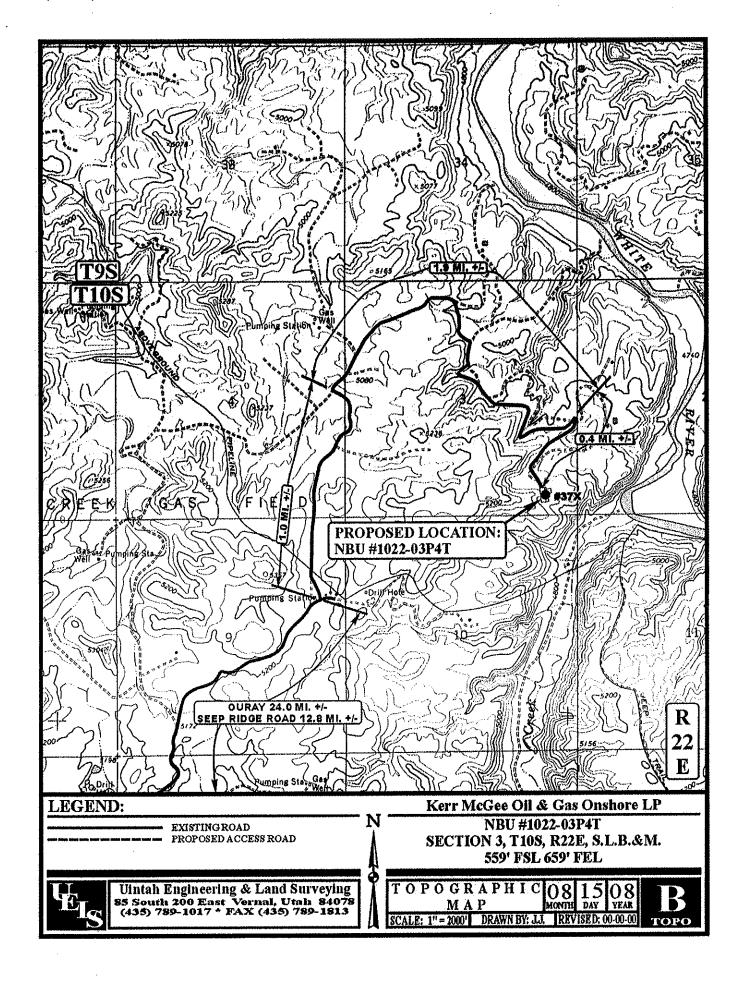
08 15 08 montes day year

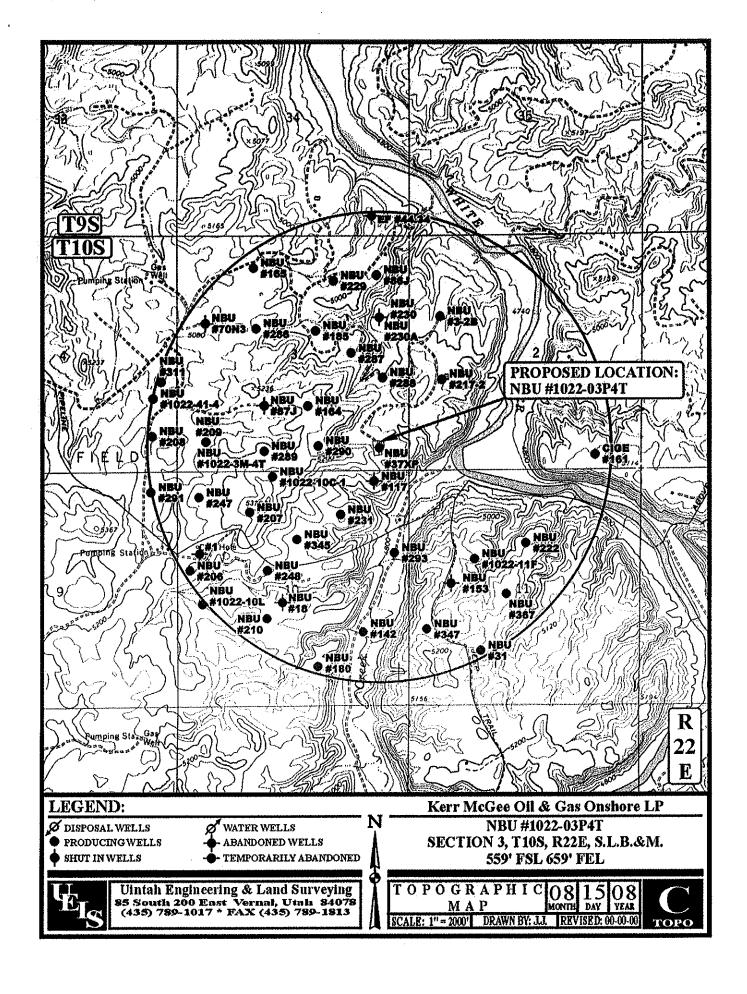
рното

TAKEN BY: L.K. DRAWN BY: J.J. REVISED: 00-00-00









United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

October 6, 2008

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2008 Plan of Development Natural Buttes Unit Uintah

County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2008 within the Natural Buttes Unit, Uintah County, Utah.

API # WELL NAME LOCATION

(Proposed PZ MESA VERDE)

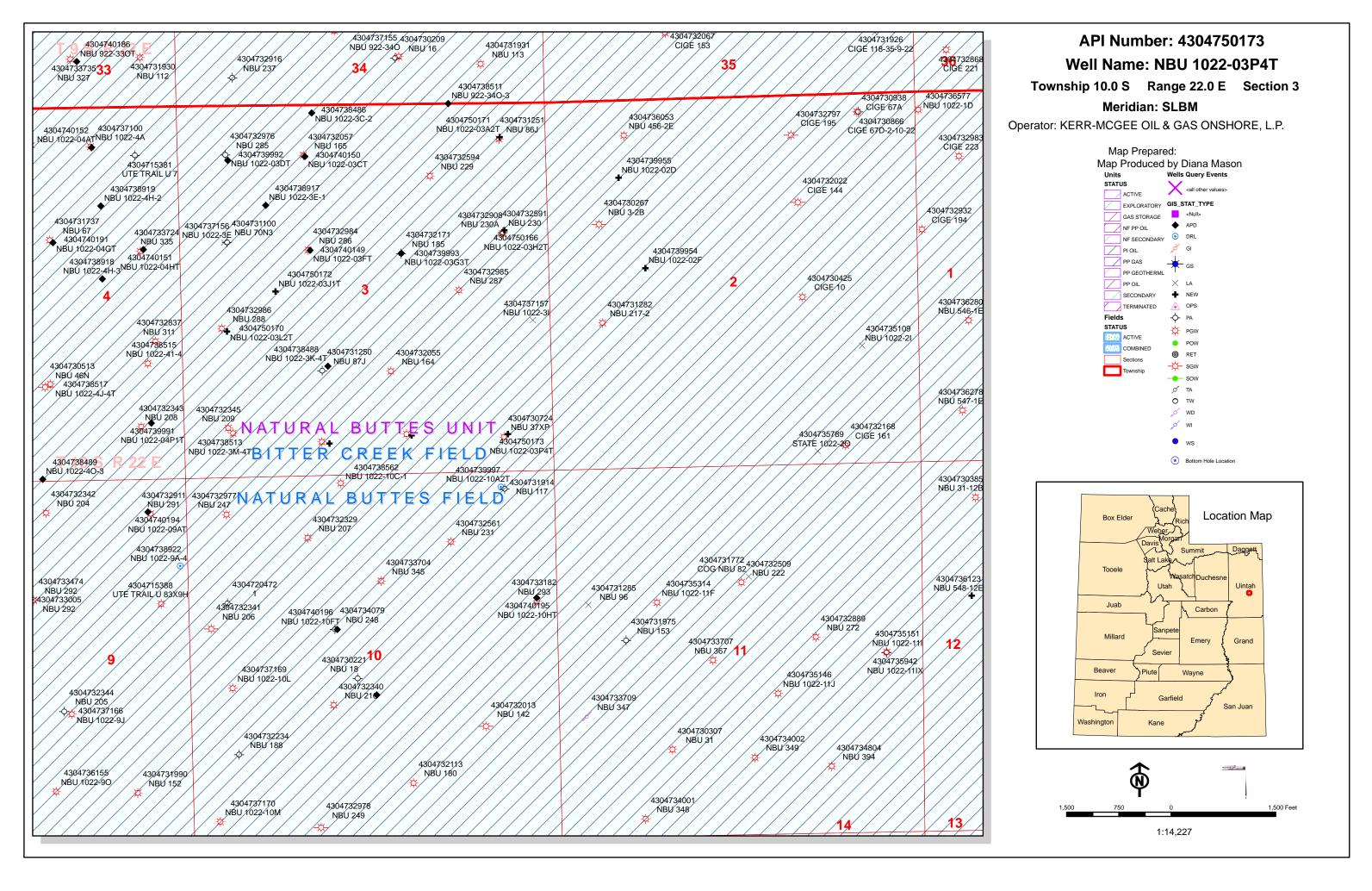
43-047-50166 NBU 1022-03H2T Sec 03 T10S R22E 1809 FNL 0662 FEL 43-047-50167 NBU 1022-03N4T Sec 03 T10S R22E 0467 FSL 2043 FWL 43-047-50168 NBU 1022-03O3T Sec 03 T10S R22E 0561 FSL 2042 FEL 43-047-50170 NBU 1022-03L2T Sec 03 T10S R22E 2092 FSL 0607 FWL 43-047-50171 NBU 1022-03A2T Sec 03 T10S R22E 0478 FNL 0706 FEL 43-047-50172 NBU 1022-03J1T Sec 03 T10S R22E 2639 FSL 1316 FEL 43-047-50173 NBU 1022-03P4T Sec 03 T10S R22E 0559 FSL 0659 FEL

This office has no objection to permitting the wells at this time.

/s/ Michael L. Coulthard

bcc: File – Natural Buttes Unit
Division of Oil Gas and Mining

Central Files Agr. Sec. Chron Fluid Chron



From: Jim Davis

To: Bonner, Ed; Mason, Diana Date: 10/23/2008 8:09 AM

Subject: Kerr MCGee Approvals NBU 922-29P...

The following locations have been approved by SITLA including paleo and arch clearance.

Kerr-McGee's NBU 922-29P1CS [API #4304750073] Kerr-McGee's NBU 922-29P3DS [API #4304750078] Kerr-McGee's NBU 922-29P1BS [API #4304750079]

-Jim

Jim Davis Utah Trust Lands Administration jimdavis1@utah.gov Phone: (801) 538-5156

WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED:	10/2/2008		API NO. ASSIGNED:	43047501730000
WELL NAME:	NBU 1022-03P4T			
OPERATOR:	KERR-MCGEE OIL & GAS ONS	SHORE, L.P. (N2995)	PHONE NUMBER:	720 929-6666
CONTACT:	Raleen White			
PROPOSED LOCATION:	SESE 3 100S 220E		Permit Tech Review:	
SURFACE:	0559 FSL 0659 FEL		Engineering Review:	
воттом:	0559 FSL 0659 FEL		Geology Review:	
COUNTY:	UINTAH			
LATITUDE:	39.97219		LONGITUDE:	-109.41832
UTM SURF EASTINGS:	635073.00		NORTHINGS:	4425658.00
FIELD NAME:	NATURAL BUTTES			
LEASE TYPE:	1 - Federal			
LEASE NUMBER:	UTU-01191-A		PROPOSED FORMATION:	WSMVD
SURFACE OWNER:	1 - Federal		COALBED METHANE:	NO
RECEIVED AND/OR REVI	EWED:	LOCATION AND SIT	ING:	
 PLAT		R649-2-3.		
▶ Bond: FEDERAL - WYB	3-000291	Unit: NATURAL B	UTTES	
Potash		R649-3-2. Gen	eral	
☑ Oil Shale 190-5				
Oil Shale 190-3		R649-3-3. Exce	eption	
Oil Shale 190-13		Drilling Unit		
✓ Water Permit: Permit	: #43-8496	Board Cause	No: Cause 173-14	
RDCC Review:		Effective Date	e: 12/2/1999	
Fee Surface Agreeme	ent	Siting: 460' fr	r u bdry & uncomm. tract	
Intent to Commingle	:	R649-3-11. Dir	ectional Drill	
Comments: Presite (Completed			
	Completed nmingling - ddoucet			

4 - Federal Approval - dmason 17 - Oil Shale 190-5(b) - dmason



State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER

Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Permit To Drill

Well Name: NBU 1022-03P4T
API Well Number: 43047501730000
Lease Number: UTU-01191-A
Surface Owner: FEDERAL
Approval Date: 12/23/2008

Issued to:

KERR-MCGEE OIL & GAS ONSHORE, L.P., P.O. Box 173779, Denver, CO 80217

Authority:

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 173-14.

Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

Commingle:

In accordance with Cause No. 173-14, commingling the production from the Wasatch formation and the Mesaverde formation in this well is allowed.

General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with the Order in Cause No. 190-5(b) dated October 28, 1982, the operator shall comply with the requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operators shall ensure that the surface and or production casing is properly cemented over the entire oil shale section as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the division.

Notification Requirements:

Notify the Division with 24 hours of spudding the well.

• Contact Carol Daniels at (801) 538-5284.

API Well No: 43047501730000

Notify the Division prior to commencing operations to plug and abandon the well.

• Contact Dustin Doucet at (801) 538-5281 office (801) 733-0983 home

Reporting Requirements:

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

Approved By:

Gil Hunt

Associate Director, Oil & Gas

Die Hunt

	STATE OF UTAH		FORM 9			
	DEPARTMENT OF NATURAL RESOURCE. DIVISION OF OIL, GAS, AND MIN		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-01191-A			
SUNDF	RY NOTICES AND REPORTS	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:			
Do not use this form for proposottom-hole depth, reenter plu DRILL form for such proposals.	sals to drill new wells, significantly deepen or gged wells, or to drill horizontal laterals. Us	existing wells below current se APPLICATION FOR PERMIT TO	7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES			
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 1022-03P4T			
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS	HORE, L.P.		9. API NUMBER: 43047501730000			
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S	treet, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6587 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES			
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0559 FSL 0659 FEL			COUNTY: UINTAH			
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: SESE Section: 3 T	IP, RANGE, MERIDIAN: Fownship: 10.0S Range: 22.0E Meridian: S		STATE: UTAH			
11. CHE	CK APPROPRIATE BOXES TO INDICAT	E NATURE OF NOTICE, REPORT,	OR OTHER DATA			
TYPE OF SUBMISSION		TYPE OF ACTION				
	ACIDIZE	ALTER CASING	CASING REPAIR			
✓ NOTICE OF INTENT Approximate date work will start:	✓ CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME			
5/21/2009	☐ CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE			
SUBSEQUENT REPORT	DEEPEN	FRACTURE TREAT	☐ NEW CONSTRUCTION			
Date of Work Completion:	OPERATOR CHANGE	PLUG AND ABANDON	☐ PLUG BACK			
	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION			
SPUD REPORT Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON			
	☐ TUBING REPAIR	☐ VENT OR FLARE	WATER DISPOSAL			
☐ DRILLING REPORT	☐ WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION			
Report Date:	☐ WILDCAT WELL DETERMINATION	OTHER	OTHER:			
12 DESCRIBE PROPOSED OF CO	MMDI ETED OPERATIONS. Clearly show all pert	inent details including dates, denths, v	olumes etc			
Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests to change the surface location of this well. The surface location is changing FROM: 559' FSL 659' FEL TO: 519' FSL 654' FEL. All other information as originally submitted remains the same. No additional surface disturbance from that amount approved in the original APD is anticipated. If you have any questions, please contact the undersigned. Thank you. By: Approved by the Utah Division of Oil, Gas and Mining						
NAME (PLEASE PRINT) Danielle Piernot	PHONE NUMBER 720 929-6156	TITLE Regulatory Analyst				
SIGNATURE	/ 20 323-01JU	DATE				
N/A		5/18/2009				

Kerr-McGee Oil & Gas Onshore LP

NBU #1022-03P4T

LOCATED IN UINTAH COUNTY, UTAH SECTION 3, T10S, R22E, S.L.B.&M.

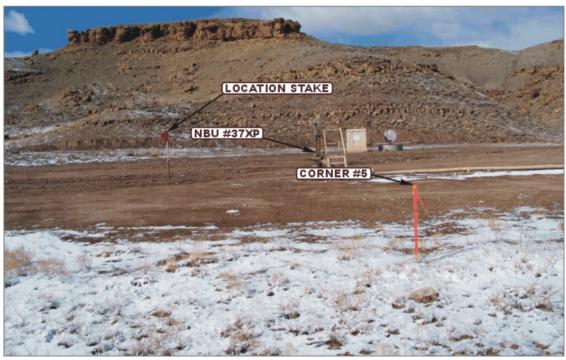


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: WESTERLY

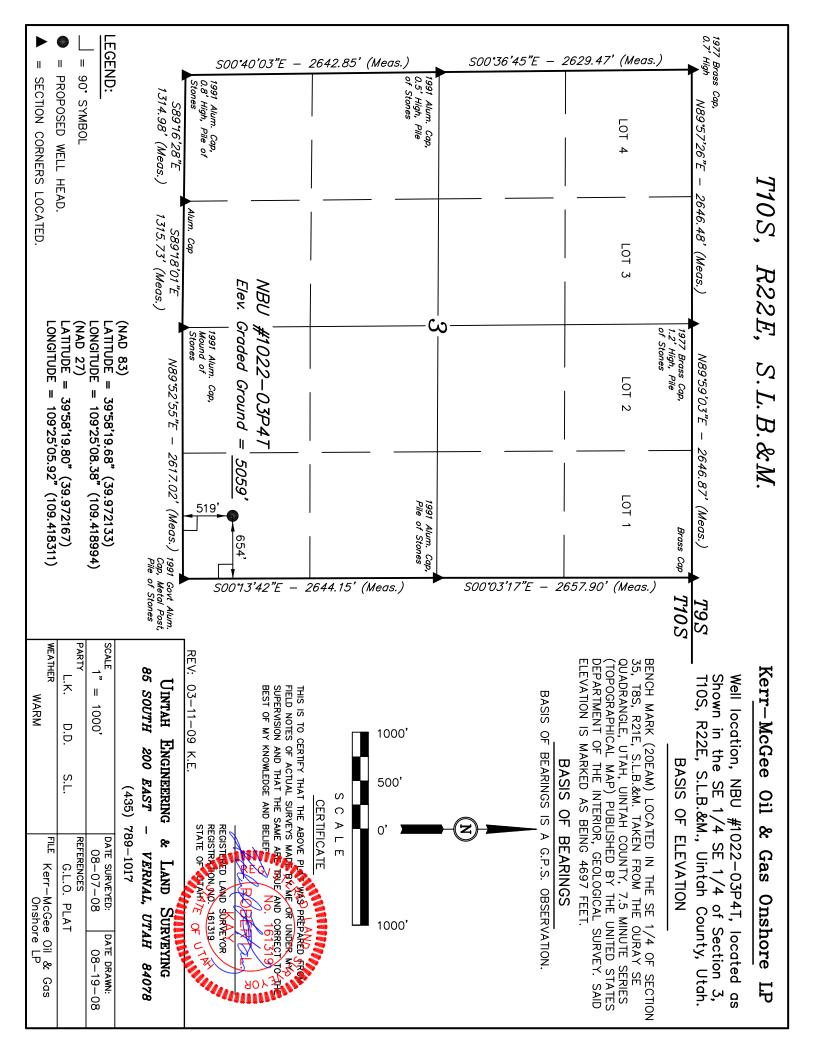


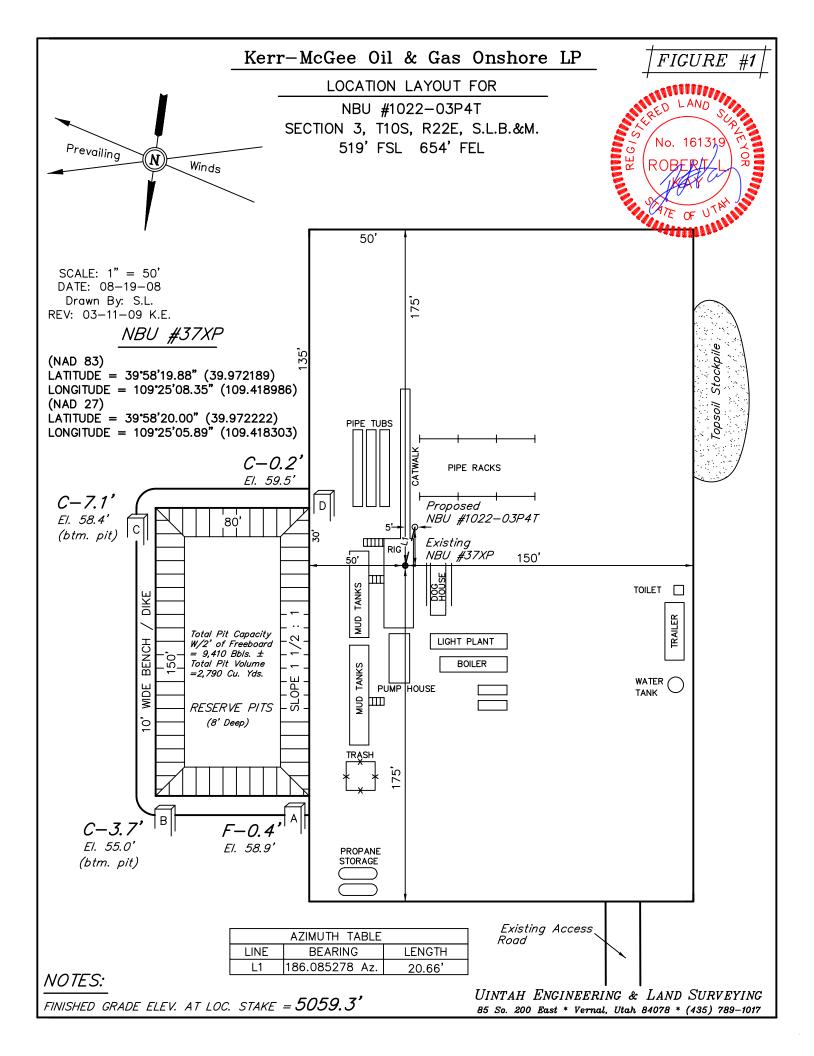
PHOTO: VIEW OF EXISTING ACCESS

CAMERA ANGLE: SOUTHEASTERLY



LOCATION PHOTOS					рното
TAKEN BY: L.K.	DRAWN BY: J.J.	REVISED: 03-11-09			

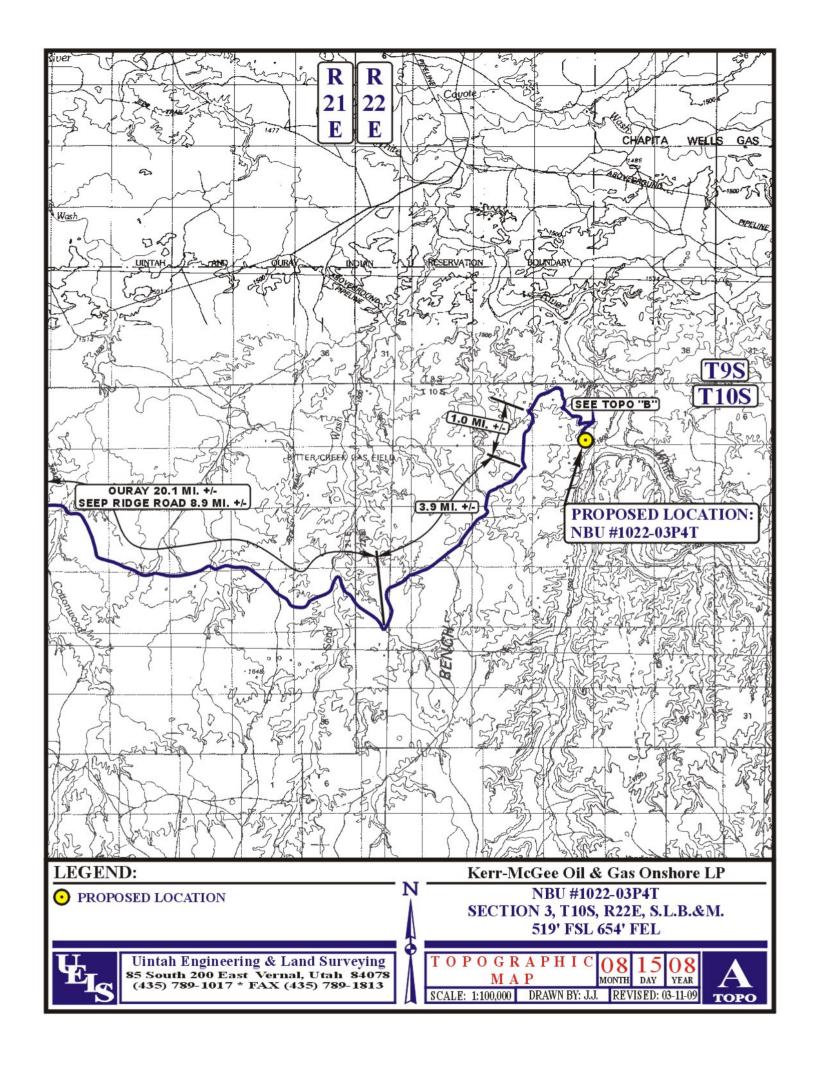


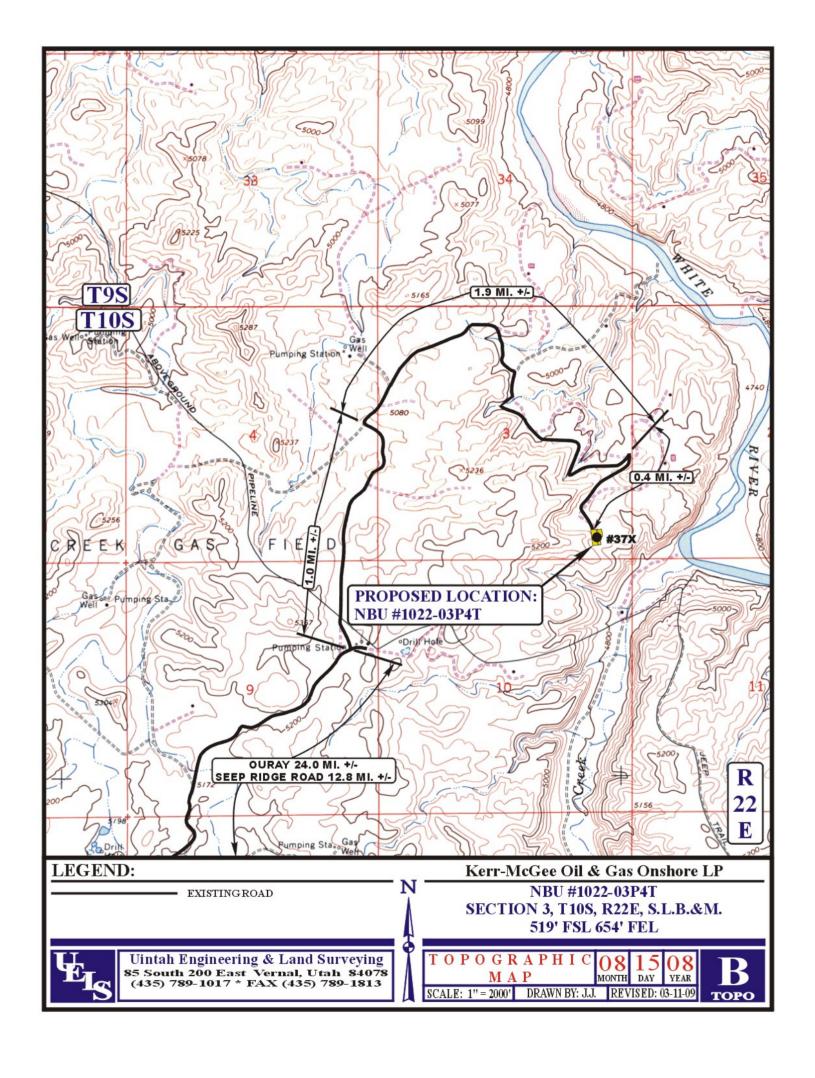


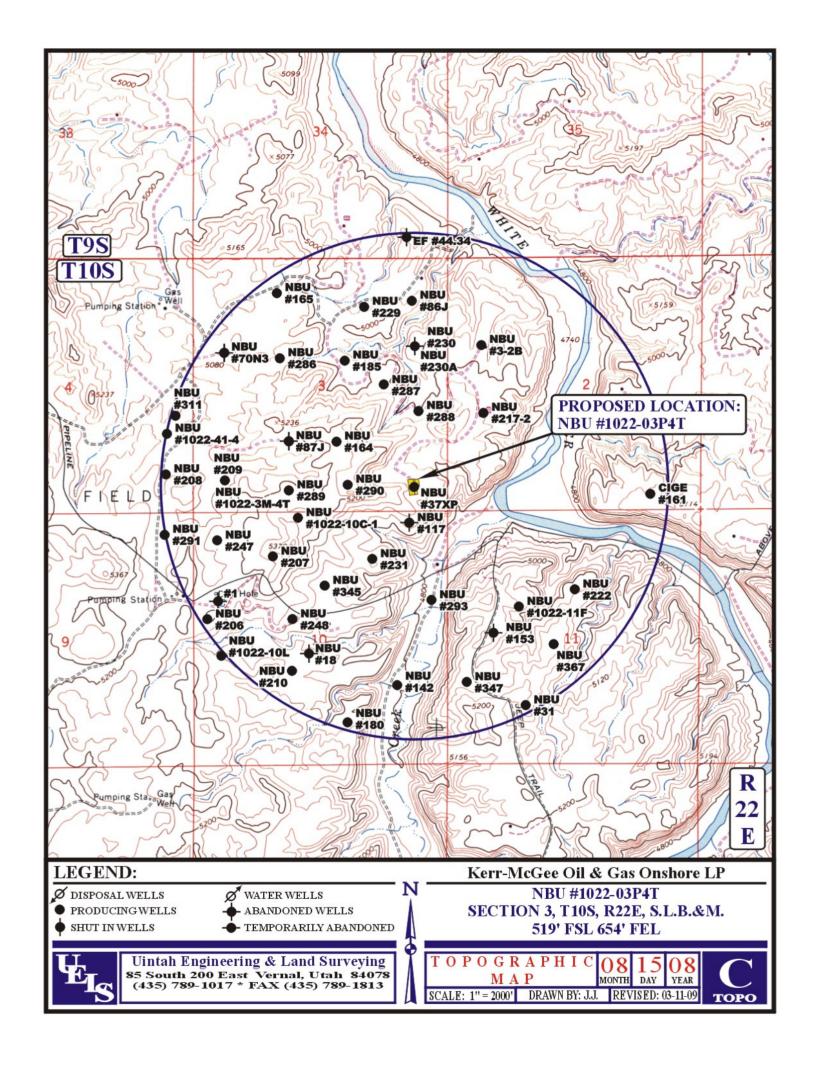
Kerr-McGee Oil & Gas Onshore LP NBU #1022-03P4T SECTION 3, T10S, R22E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 11.2 MILES ON THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 8.9 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST: TURN LEFT AND PROCEED IN AN NORTHEASTERLY DIRECTION APPROXIMATELY 3.9 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTH; TURN LEFT AND PROCEED IN A NORTHERLY DIRECTION APPROXIMATELY 1.0 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN RIGHT AND PROCEED IN AN NORHTEASTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 1.9 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST: SOUTHWESTERLY. **TURN RIGHT AND PROCEED** IN A SOUTHEASTERLY DIRECTION APPROXIMATELY 0.4 MILES TO THE EXISTING WELL #37X AND THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 58.3 MILES.







	FORM 9			
	5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-01191-A			
SUNDF	RY NOTICES AND REPORTS O	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
	sals to drill new wells, significantly deepen ex Igged wells, or to drill horizontal laterals. Use		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES	
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 1022-03P4T	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS	9. API NUMBER: 43047501730000			
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S	treet, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6007 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0519 FSL 0654 FEL	COUNTY: UINTAH			
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: SESE Section: 3 T	STATE: UTAH			
11. CHE	CK APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPORT,	OR OTHER DATA	
TYPE OF SUBMISSION		TYPE OF ACTION		
	_ ACIDIZE	ALTER CASING	CASING REPAIR	
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME	
12/22/2009	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE	
SUBSEQUENT REPORT	DEEPEN	FRACTURE TREAT	☐ NEW CONSTRUCTION	
Date of Work Completion:	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK	
_	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION	
SPUD REPORT Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON	
	☐ TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL	
☐ DRILLING REPORT	☐ WATER SHUTOFF	SI TA STATUS EXTENSION	✓ APD EXTENSION	
Report Date:	☐ WILDCAT WELL DETERMINATION ☐	OTHER	OTHER:	
12. DESCRIBE PROPOSED OR CO	MPLETED OPERATIONS. Clearly show all pertin	nent details including dates, depths, v	olumes, etc.	
extension to this A	as Onshore, L.P. (Kerr-McGee) of PD for the maximum time allow with any questions and/or comm	ed. Please contact the	Approved by the Utah Division of Oil, Gas and Mining	
		Da	ate: December 21, 2009	
		R	v. Jacquill	
		_		
NAME (PLEASE PRINT)	PHONE NUMBER	TITLE Regulatory Applyet		
Danielle Piernot	720 929-6156	Regulatory Analyst		
SIGNATURE N/A		DATE 12/17/2009		



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047501730000

API: 43047501730000 Well Name: NBU 1022-03P4T

Location: 0519 FSL 0654 FEL QTR SESE SEC 3 TWNP 100S RNG 220E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date Original Permit Issued: 12/23/2008

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not

 If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes No Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes No Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes No Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? Yes No Has the approved source of water for drilling changed? Yes No Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes No Is bonding still in place, which covers this proposed well? Yes No No Approved by the No Utah Division of Oil, Gas and Mining 	lire revision. Following is a checklist of some items related to the application, which should be verified.
 Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes No Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? Yes No Has the approved source of water for drilling changed? Yes No Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes No Is bonding still in place, which covers this proposed well? Yes No 	
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· · · · · · · · · · · · · · · · · · ·	• Is bonding still in place, which covers this proposed well? Yes No Utah Division of
nature: Danielle Piernot Date: 12/17/2009	nature: Danielle Piernot Date: 12/17/2009
Title: Regulatory Analyst Representing: KERR-MCGEE OIL & GAS ONSHOR December 21, 2009	Title: Regulatory Analyst Representing: KERR-MCGEE OIL & GAS ONSHORDate: December 21, 2009

Sig

	STATE OF UTAH		FORM 9			
	DEPARTMENT OF NATURAL RESOURCE. DIVISION OF OIL, GAS, AND MIN		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-01191-A			
SUNDF	RY NOTICES AND REPORTS	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:			
Do not use this form for proposottom-hole depth, reenter plu DRILL form for such proposals.	sals to drill new wells, significantly deepen or gged wells, or to drill horizontal laterals. Us	existing wells below current se APPLICATION FOR PERMIT TO	7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES			
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TYPE OF SUBMISSION		TYPE OF ACTION				
	ACIDIZE	ALTER CASING	CASING REPAIR			
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5/21/2009	☐ CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE			
SUBSEQUENT REPORT	DEEPEN	FRACTURE TREAT	☐ NEW CONSTRUCTION			
Date of Work Completion:	OPERATOR CHANGE	PLUG AND ABANDON	☐ PLUG BACK			
	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION			
SPUD REPORT Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON			
	☐ TUBING REPAIR	☐ VENT OR FLARE	WATER DISPOSAL			
☐ DRILLING REPORT	☐ WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION			
Report Date:	☐ WILDCAT WELL DETERMINATION	OTHER	OTHER:			
12 DESCRIBE PROPOSED OF CO	MMDI ETED OPERATIONS. Clearly show all pert	inent details including dates, denths, v	olumes etc			
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NAME (PLEASE PRINT) Danielle Piernot	PHONE NUMBER 720 929-6156	TITLE Regulatory Analyst				
SIGNATURE	/ 20 323-01JU	DATE				
N/A		5/18/2009				

Kerr-McGee Oil & Gas Onshore LP

NBU #1022-03P4T

LOCATED IN UINTAH COUNTY, UTAH SECTION 3, T10S, R22E, S.L.B.&M.

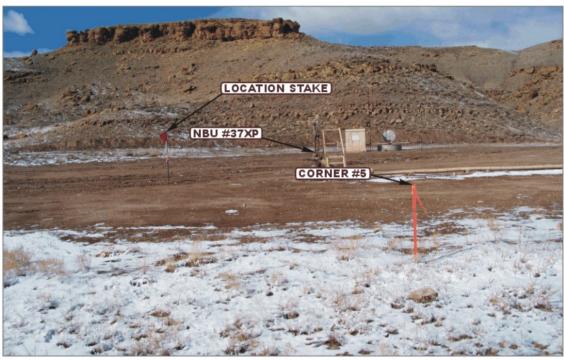


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: WESTERLY

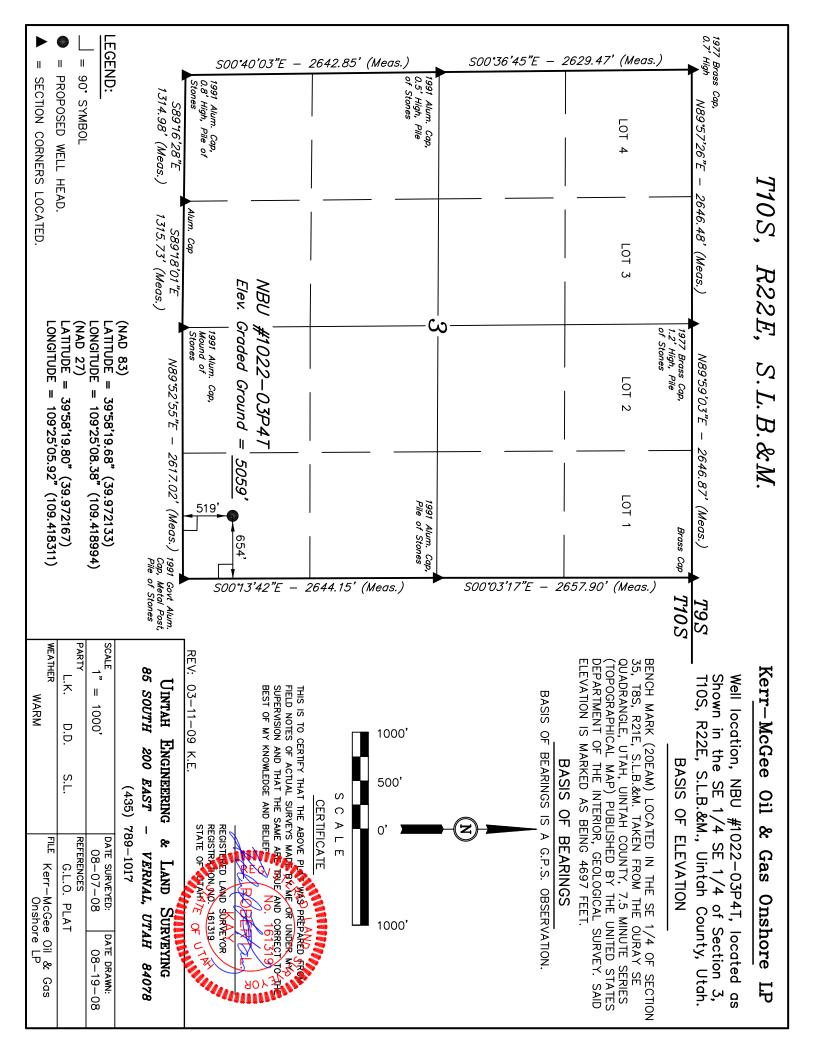


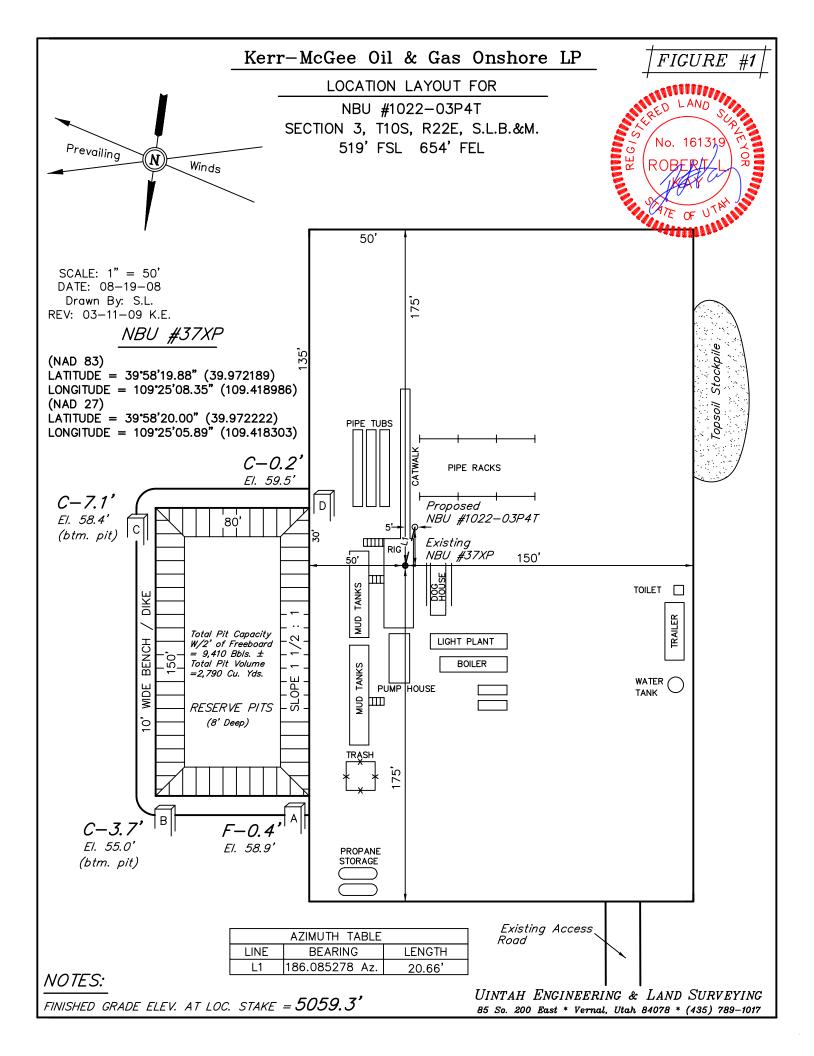
PHOTO: VIEW OF EXISTING ACCESS

CAMERA ANGLE: SOUTHEASTERLY



LOCATION					рното
TAKEN BY: L.K.	DRAWN BY: J.J.	. REV	ISED: 0	3-11-09	

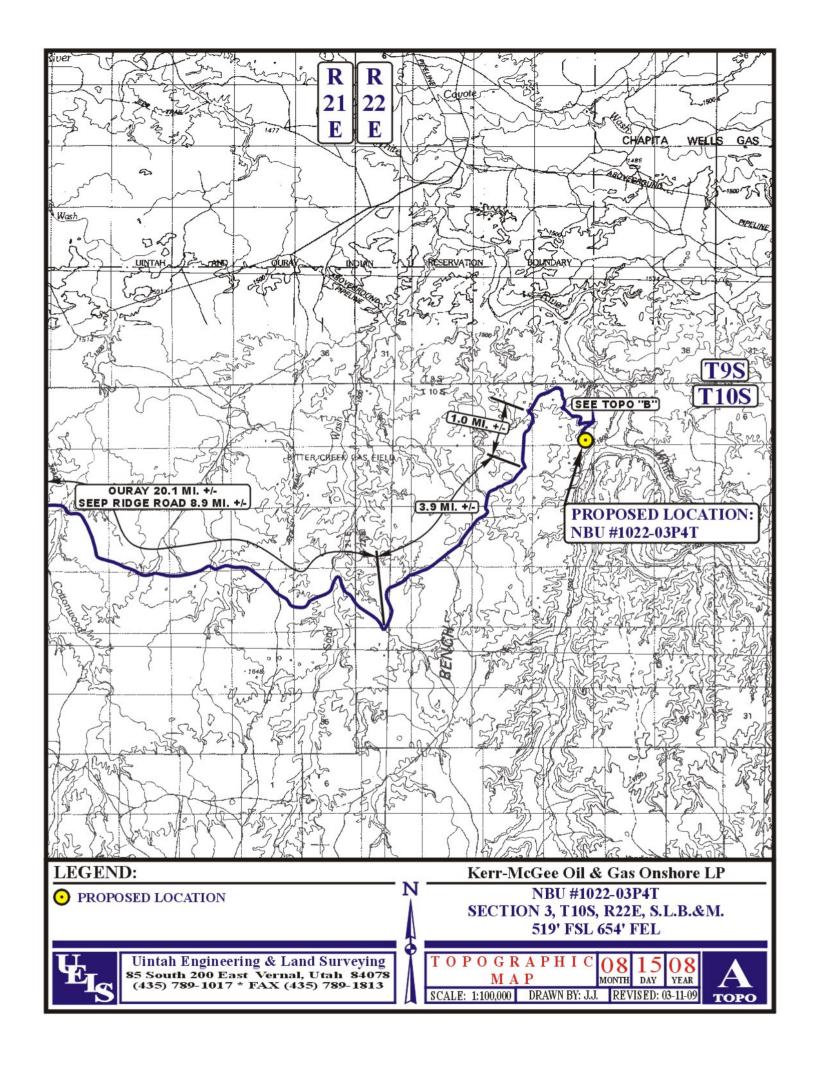


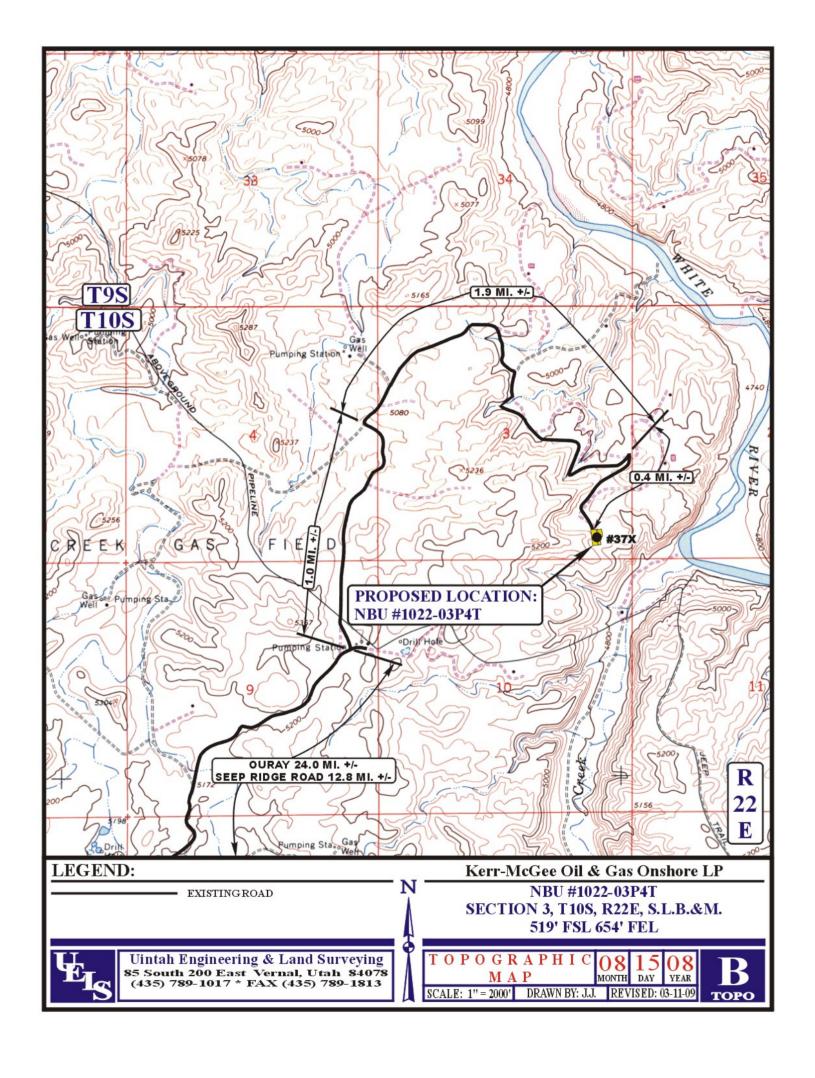


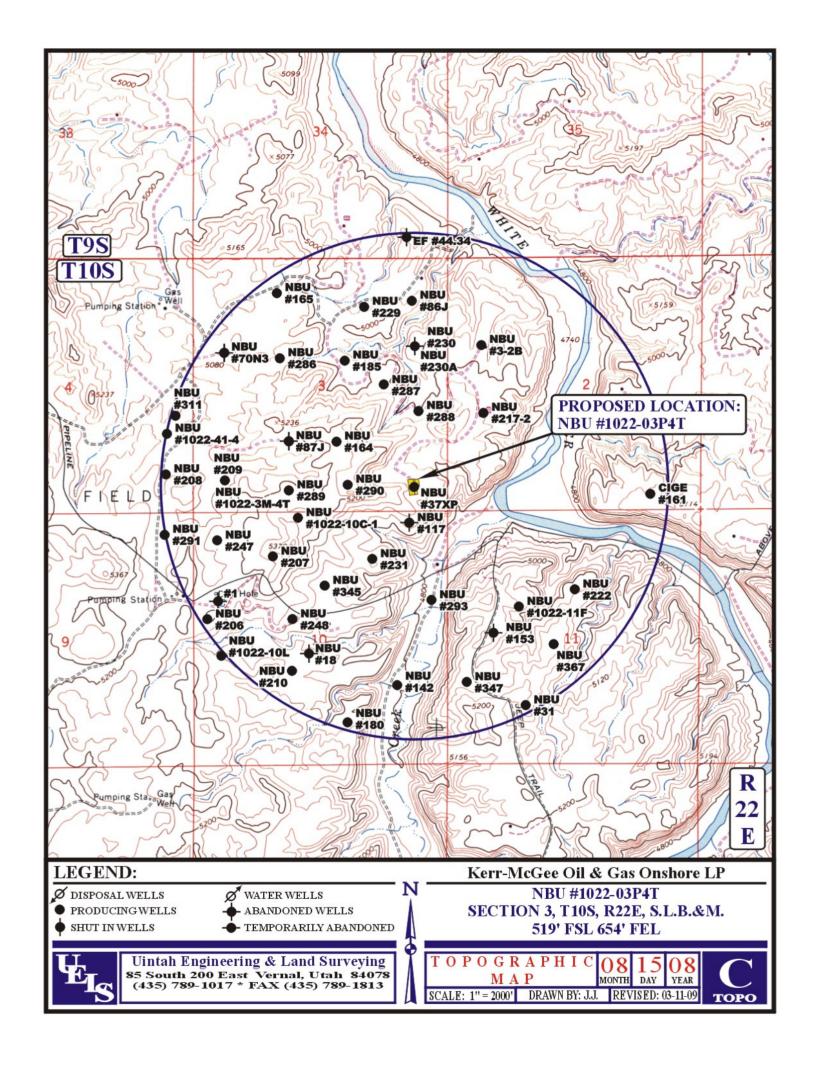
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TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 58.3 MILES.







	STATE OF UTAH		FORM 9
	DIVISION OF OIL, GAS, AND MIN		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-01191-A
SUNDF	RY NOTICES AND REPORTS	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
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4. LOCATION OF WELL FOOTAGES AT SURFACE: 0519 FSL 0654 FEL	COUNTY: UINTAH		
Qtr/Qtr: SESE Section: 03	STATE: UTAH		
11. CHE	OR OTHER DATA		
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	☐ ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
12/23/2010	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
Date of Work Completion:	☐ OPERATOR CHANGE	PLUG AND ABANDON	☐ PLUG BACK
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SPUD REPORT Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
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☐ DRILLING REPORT	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	✓ APD EXTENSION
Report Date:	□ WILDCAT WELL DETERMINATION	OTHER	OTHER:
12 DESCRIBE BRODOSED OR CO	MPLETED OPERATIONS. Clearly show all per		<u></u>
Kerr-McGee Oil & G extension to this A	las Onshore, L.P. (Kerr-McGee APD for the maximum time allowith any questions and/or con) respectfully requests an owed. Please contact the	Approved by the Utah Division of Oil, Gas and Mining
			12/23/2010
		ט	ate: 12/23/2010
		В	y: Dolly Ill
			50 V (50 C)
NAME (PLEASE PRINT)	PHONE NUMBER	TITLE	
Danielle Piernot	720 929-6156	Regulatory Analyst	
SIGNATURE N/A		DATE 12/20/2010	



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047501730000

API: 43047501730000 **Well Name:** NBU 1022-03P4T

Location: 0519 FSL 0654 FEL QTR SESE SEC 03 TWNP 100S RNG 220E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date Original Permit Issued: 12/23/2008

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

require revi	sion. Following is a che	cklist of sor	ne items relate	ed to the app	lićation, v	which should be veri	ified.
	ated on private land, ha ed? 🔵 Yes 🍺 No	s the owne	rship changed,	if so, has th	e surface	agreement been	
	any wells been drilled in requirements for this le				ch would	affect the spacing o	r
	nere been any unit or ot s proposed well? 🔵 Y		nents put in pla	ace that coul	d affect th	ne permitting or ope	ratio
	there been any changes the proposed location?			ding owners	hip, or rig	htof- way, which co	uld
• Has th	ne approved source of v	ater for dr	illing changed?	? 🔵 Yes 🎚	No No		
	there been any physica e in plans from what w					e which will require No	а
• Is bor	nding still in place, whic	h covers th	is proposed w	ell? 🌘 Yes		Approved by the Utah Division of il, Gas and Mining	
Signature:	Danielle Piernot	Date: 1	12/20/2010		Datas	12/23/2010	
Title:	Regulatory Analyst Repr	esenting: k	(ERR-MCGEE OI	L & GAS ONSF	IOREAL.	. nozan 10	

	STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES		FORM 9
	DIVISION OF OIL, GAS, AND MINI	NG	5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-01191-A
SUND	RY NOTICES AND REPORTS O	N WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for proposition-hole depth, reenter plu DRILL form for such proposals.	sals to drill new wells, significantly deepen ex igged wells, or to drill horizontal laterals. Use	xisting wells below current APPLICATION FOR PERMIT TO	7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 1022-03P4T
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS	9. API NUMBER: 43047501730000		
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S	9. FIELD and POOL or WILDCAT: NATURAL BUTTES		
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0519 FSL 0654 FEL	COUNTY: UINTAH		
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: SESE Section: 03	STATE: UTAH		
11. CHE	CK APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPORT	, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
Kerr-McGee Oil & G extension to this A	CHANGE TO PREVIOUS PLANS CHANGE WELL STATUS DEEPEN OPERATOR CHANGE PRODUCTION START OR RESUME REPERFORATE CURRENT FORMATION TUBING REPAIR WATER SHUTOFF WILDCAT WELL DETERMINATION OMPLETED OPERATIONS. Clearly show all pertinas Onshore, L.P. (Kerr-McGee) APD for the maximum time allow with any questions and/or comi	respectfully requests an ved. Please contact the ments. Thank you.	NEW CONSTRUCTION PLUG BACK RECOMPLETE DIFFERENT FORMATION TEMPORARY ABANDON WATER DISPOSAL ✓ APD EXTENSION OTHER: Volumes, etc.
NAME (PLEASE PRINT)	PHONE NUMBER	TITLE	
Danielle Piernot SIGNATURE	720 929-6156	Regulatory Analyst DATE	
N/A		12/21/2011	



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047501730000

API: 43047501730000 **Well Name:** NBU 1022-03P4T

Location: 0519 FSL 0654 FEL QTR SESE SEC 03 TWNP 100S RNG 220E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date Original Permit Issued: 12/23/2008

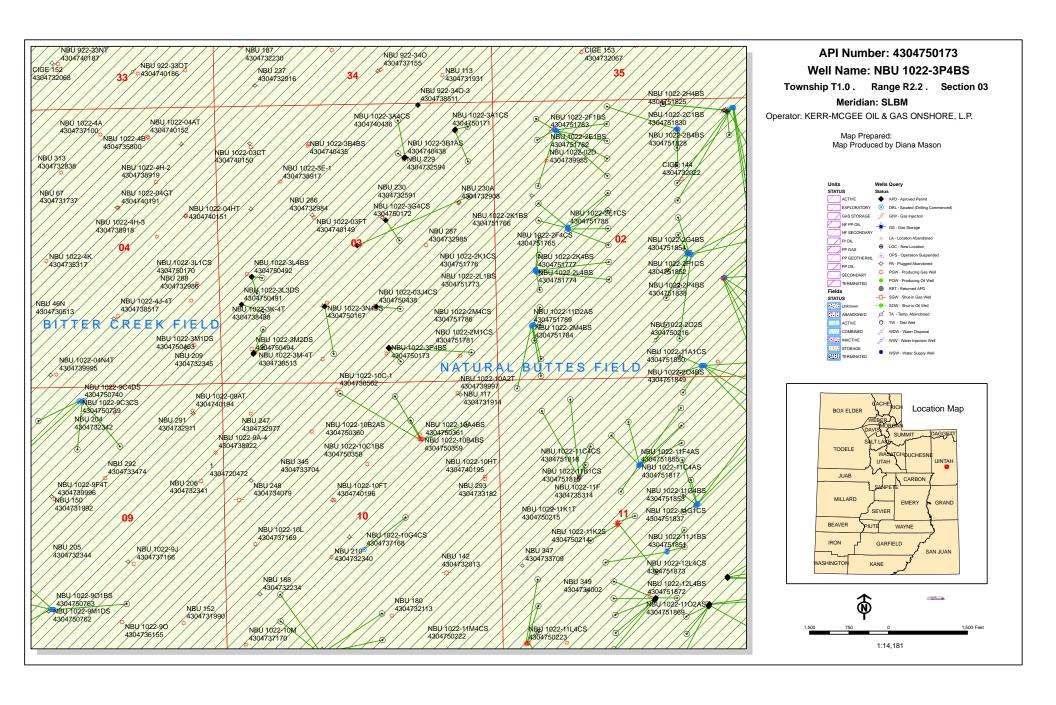
The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

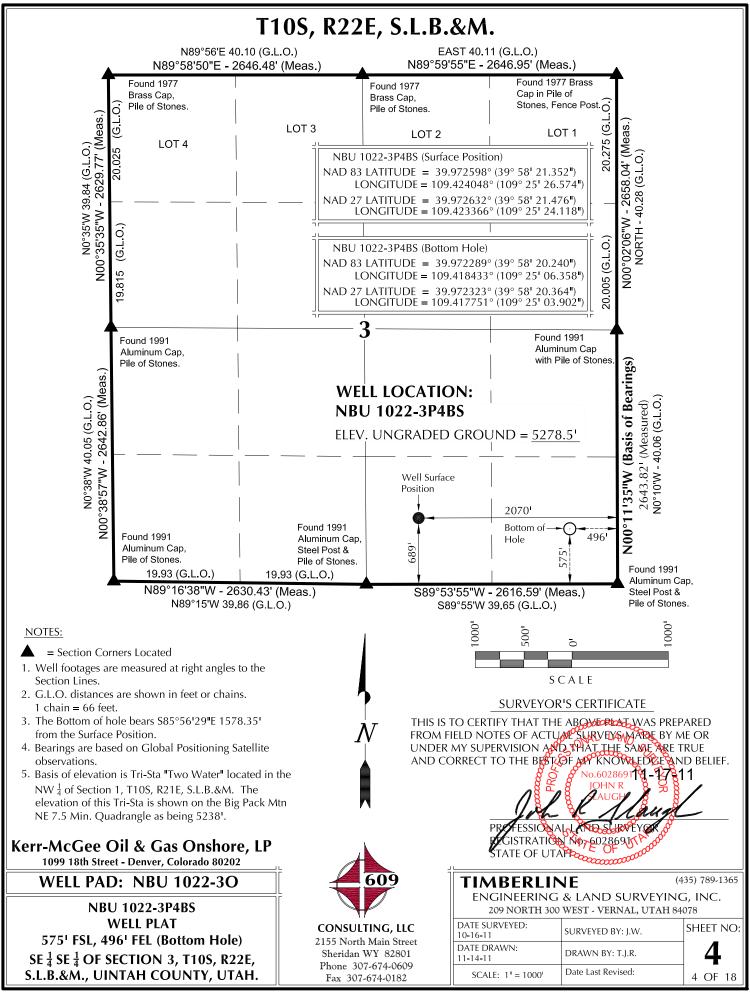
• If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes No
 Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes No
 Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes No
 Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? Yes No
• Has the approved source of water for drilling changed? Yes No
 Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes No
• Is bonding still in place, which covers this proposed well? Yes No

Signature: Danielle Piernot **Date:** 12/21/2011

Title: Regulatory Analyst Representing: KERR-MCGEE OIL & GAS ONSHORE, L.P.

	STATE OF UTAH DEPARTMENT OF NATURAL RESOURCE	CES	FORM 9					
ı	DIVISION OF OIL, GAS, AND MIN		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-01191-A					
SUNDR	RY NOTICES AND REPORTS	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:					
Do not use this form for pro current bottom-hole depth, FOR PERMIT TO DRILL form	oposals to drill new wells, significantly reenter plugged wells, or to drill horizo n for such proposals.	deepen existing wells below ontal laterals. Use APPLICATION	7.UNIT OF CA AGREEMENT NAME: NATURAL BUTTES					
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 1022-3P4BS					
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.							
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18tl	9. FIELD and POOL or WILDCAT: 5MATURAL BUTTES							
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0689 FSL 2070 FEL	COUNTY: UINTAH							
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: SESE Section: 0	STATE: UTAH							
11. CHEC	K APPROPRIATE BOXES TO INDICA	TE NATURE OF NOTICE, REPOF	RT, OR OTHER DATA					
TYPE OF SUBMISSION		TYPE OF ACTION						
The operator is requoriginally approx 1022-03P4T to NBI Change (New Plat FSL/ 2070 FEL/ Attached) / 4. Su Diagram Attached) /	CHANGE TO PREVIOUS PLANS CHANGE WELL STATUS DEEPEN OPERATOR CHANGE PRODUCTION START OR RESUME REPERFORATE CURRENT FORMATION TUBING REPAIR WATER SHUTOFF WILDCAT WELL DETERMINATION COMPLETED OPERATIONS. Clearly show uesting the approval of the fived APD: 1. Change the Well 1022-3P4BS / 2. Surface & is Attached) / a. From = 519 / 3. Proposed Total Depth (Narface Hole Size and Casing (15) / 5. Change to a Directional (16) / 6. Surface Use Plan of Operations.	following changes to the II Name = from NBU & Bottom Hole Location FSL/ 654 FEL To = 689 Iew Drilling Program Grade (New Wellbore Well (Directional Drilling	CASING REPAIR CHANGE WELL NAME CONVERT WELL TYPE NEW CONSTRUCTION PLUG BACK RECOMPLETE DIFFERENT FORMATION TEMPORARY ABANDON WATER DISPOSAL APD EXTENSION OTHER: Depths, volumes, etc. Approved by the Utah Division of Oil, Gas and Mining Date: June 04, 2012 By:					
NAME (PLEASE PRINT) Gina Becker	PHONE NUMB 720 929-6086	BER TITLE Regulatory Analyst II						
SIGNATURE N/A		DATE 5/21/2012						





Kerr-McGee Oil & Gas Onshore, LP WELL PAD – NBU 1022-3O WELLS - NBU 1022-3O4CS, NBU 1022-3O4BS, NBU 1022-3P4CS, NBU 1022-3P4BS, NBU 1022-3P1CS & NBU 1022-3O1CS Section 3, T10S, R22E, S.L.B.&M.

From the intersection of U.S. Highway 40 and 500 East Street in Vernal, Utah, proceed in an easterly, then southerly direction along U.S. Highway 40 approximately 3.3 miles to the junction of State Highway 45. Exit right and proceed in a southerly direction along State Highway 45 approximately 20.2 miles to the junction of the Glen Bench Road (County B Road 3260). Exit right and proceed in a southwesterly direction along the Glen Bench Road approximately 23.8 miles to the intersection of the Bitter Creek Road (County B Road 4120). Exit left and proceed in a southeasterly direction along the Bitter Creek Road approximately 4.0 miles to a Class D County Road to the northeast. Exit left and proceed in a northeasterly direction along the Class D County Road approximately 4.6 miles to a second Class D County Road to the east. Exit right and proceed in an easterly direction along the second Class D County Road approximately 0.5 miles to the proposed NBU 1022-3K well pad. Proceed in an easterly direction through the proposed NBU 1022-3K well pad approximately 480 feet to an existing service road to the east. Proceed easterly direction along the service road approximately in an 0.1 miles to the proposed NBU 1022-3J well pad. Proceed in a southeasterly direction through the NBU 1022-3J well pad approximately 360 feet to the proposed access road to the southeast. Follow road flags in a southeasterly, then southwesterly direction approximately 740 feet to the proposed well location.

Total distance from Vernal, Utah to the proposed well location is approximately 56.7 miles in a southerly direction.

SHEET 18 OF 18

NBU 1022-30 Pad Drilling Program

1 of 7

Kerr-McGee Oil & Gas Onshore. L.P.

NBU 1022-3P4BS

Surface: 689 FSL / 2070 FEL SWSE BHL: 575 FSL / 496 FEL SESE

Section 3 T10S R22E

Unitah County, Utah Mineral Lease: UTU-01191A

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. & 2. <u>Estimated Tops of Important Geologic Markers</u>: <u>Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations</u>:

<u>Formation</u>	<u>Depth</u>	<u>Resource</u>
Uinta	0 - Surface	
Green River	1,254'	
Birds Nest	1,514'	Water
Mahogany	2,047'	Water
Wasatch	4,367'	Gas
Mesaverde	6,679'	Gas
Sego	8,817'	Gas
Castlegate	8,986'	Gas
Blackhawk	9,418'	Gas
TVD	10,018'	
TD	10,326'	

3. **Pressure Control Equipment** (Schematic Attached)

Please refer to the attached Drilling Program

4. Proposed Casing & Cementing Program:

Please refer to the attached Drilling Program

5. <u>Drilling Fluids Program:</u>

Please refer to the attached Drilling Program

6. <u>Evaluation Program:</u>

Please refer to the attached Drilling Program

NBU 1022-30 Pad Drilling Program
2 of 7

7. Abnormal Conditions:

Maximum anticipated bottom hole pressure calculated at 10018' TVD, approximately equals 6,612 psi (0.66 psi/ft = actual bottomhole gradient)

Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

Maximum anticipated surface pressure equals approximately 4,454 psi (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot, per Onshore Order No. 2).

Per Onshore Order No. 2 - Max Anticipated Surf. Press.(MASP) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point))

8. <u>Anticipated Starting Dates:</u>

Drilling is planned to commence immediately upon approval of this application.

9. Variances:

Please refer to the attached Drilling Program. Onshore Order #2 – Air Drilling Variance

Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- · Blowout Prevention Equipment (BOPE) requirements;
- · Mud program requirements; and
- Special drilling operation (surface equipment placement) requirements associated with air drilling.

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

Background

In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may

be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

2/15/2012

NBU 1022-30 Pad Drilling Program
3 of 7

The air rig is then mobilized to drill the surface casing hole by drilling a 12 1/4 inch hole for the first 200 feet, then will drill a 11inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 11 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 8-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

Variance for BOPE Requirements

The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

Variance for Mud Material Requirements

Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

Variance for Special Drilling Operation (surface equipment placement) Requirements

Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

2/15/2012

NBU 1022-30 Pad Drilling Program
4 of 7

Variance for FIT Requirements

KMG also respectfully requests a variance to Onshore Order 2, Section III, Part Bi, for the pressure integrity test (PIT, also known as a formation integrity test (FIT)). This well is not an exploratory well and is being drilled in an area where the formation integrity is well known. Additionally, when an FIT is run with the mud weight as required, the casing shoe frequently breaks down and causes subsequent lost circulation when drilling the entire depth of the well.

Conclusion

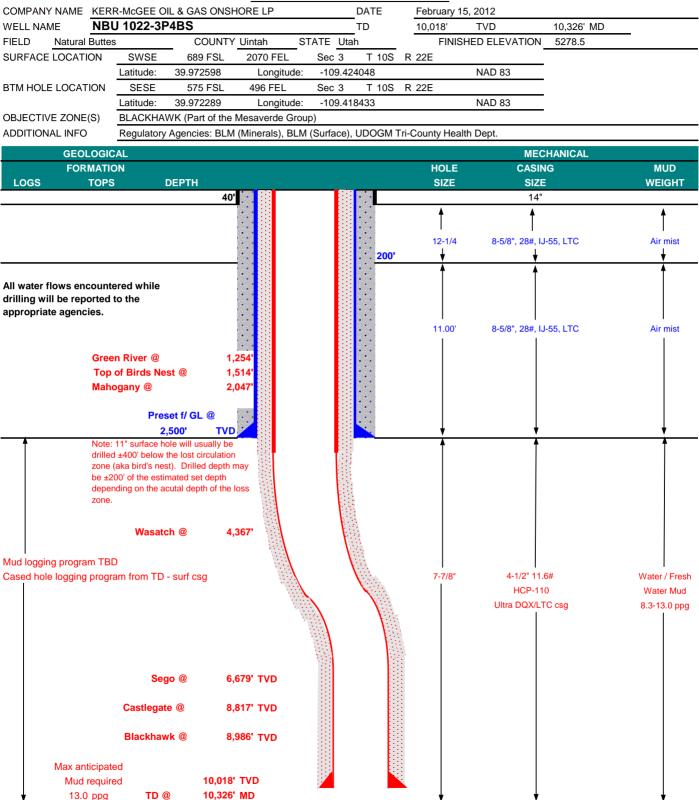
The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.

10. <u>Other Information:</u>

Please refer to the attached Drilling Program.



KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM





KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

CASING PROGRAM							DESIGN FACTORS				
										LTC	DQX
	SIZE	INT	ERVA	L	WT.	GR.	CPLG.	BURST	COLLAPSE	TE	ENSION
CONDUCTOR	14"	0	-40'								
								3,390	1,880	348,000	N/A
SURFACE	8-5/8"	0	to	2,500	28.00	IJ-55	LTC	2.15	1.61	5.68	N/A
								10,690	8,650	279,000	367,174
PRODUCTION	4-1/2"	0	to	5,000	11.60	HCP-110	DQX	1.19	1.28		3.83
	4-1/2"	5,000	to	10,326'	11.60	HCP-110	LTC	1.19	1.28	5.64	

Surface Casing:

(Burst Assumptions: TD = 13.0 ppg) 0.73 psi/ft = frac gradient @ surface shoe

Fracture at surface shoe with 0.1 psi/ft gas gradient above

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

Production casing:

(Burst Assumptions: Pressure test with 8.4ppg @ 9000 psi) 0.66 psi/ft = bottomhole gradient

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

CEMENT PROGRAM

	FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGH	Т	YIELD
SURFACE LEAD	500'	Premium cmt + 2% CaCl	180	60%	15.80		1.15
Option 1		+ 0.25 pps flocele					
TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	270	0%	15.80		1.15
		+ 2% CaCl + 0.25 pps flocele					
SURFACE		NOTE: If well will circulate water t	o surface, op	tion 2 will b	e utilized		
Option 2 LEAD	2,000'	65/35 Poz + 6% Gel + 10 pps gilsonite	180	35%	11.00		3.82
		+ 0.25 pps Flocele + 3% salt BWOW					
TAIL	500'	Premium cmt + 2% CaCl	150	35%	15.80		1.15
		+ 0.25 pps flocele					
TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80		1.15
PRODUCTION LEAD	3,866'	Premium Lite II +0.25 pps	300	35%	12.00		3.38
		celloflake + 5 pps gilsonite + 10% gel					
		+ 0.5% extender					
TAIL	6,460'	50/50 Poz/G + 10% salt + 2% gel	1,530	35%	14.30		1.31
		+ 0.1% R-3					

^{*}Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE
Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe

PRODUCTION
Float shoe, 1 jt, float collar. 15 centralizers for a Mesaverde and 20 for a Blackhawk well.

1 centralizer on the first 3 joints and one every third joint thereafter.

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

Surveys will	be taken at	1,000'	minimum	intervals.

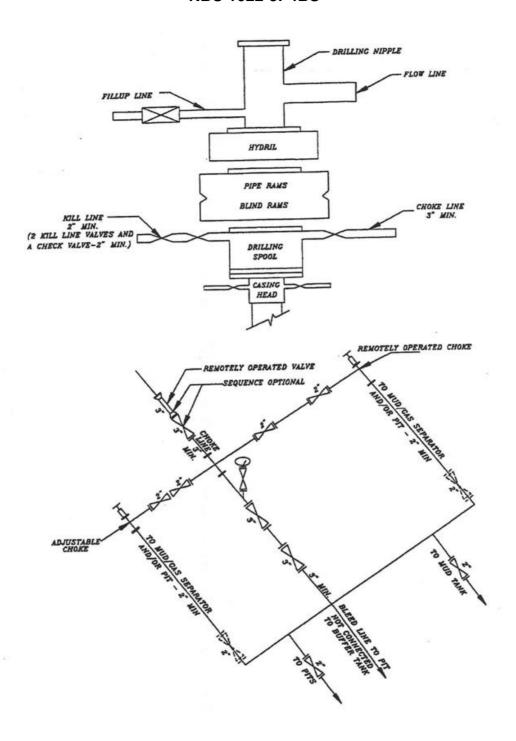
Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGI	NEER:		DATE:	
		Nick Spence / Danny Showers / Chad Loesel	_	
DRILLING SUPE	RINTENDENT:		DATE:	

Kenny Gathings / Lovel Young

^{*}Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

EXHIBIT A NBU 1022-3P4BS



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

Sundry Number: 25917 AProjecte LUTAN www.freet)48AD27,5201e/120000

Scientific Drilling

Rocky Mountain Operations

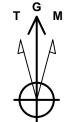
Vertical Section at 93.08° (1500 ft/in)

Site: NBU 1022-30 Well: NBU 1022-3P4BS

Wellbore: OH
Design: PLAN #1

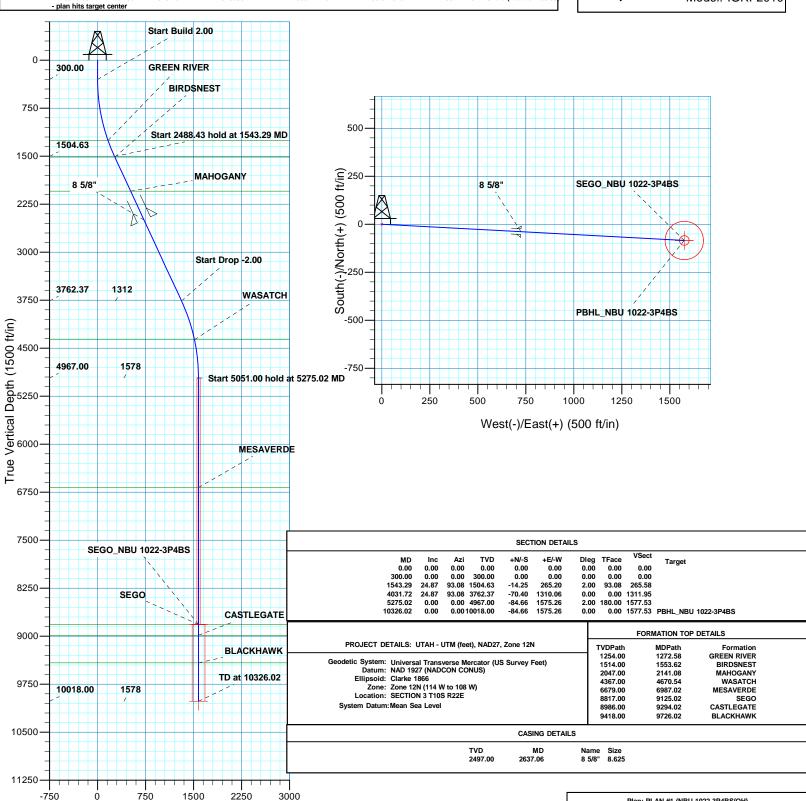


WELL DETAILS: NBU 1022-3P4BS GL 5271 & 4 KB @ 5275.00ft (ASSUMED) +N/-S Northing 14519983.78 Latittude 39.972632 Longitude -109.423366 2082152.19 DESIGN TARGET DETAILS +N/-S -84.66 +E/-W 1575.26 Northing 14519899.12 Easting 2083727.45 Latitude 39.972323 Name SEGO TVD 8817.00 Longitude -109.417751 Shape Circle (Radius: 25.00) plan hits ta center 10018.00 -84.66 14519899.12 2083727.45 39.972323 -109.417751 Circle (Radius: 100.00 PBHL



Azimuths to Grid North True North: -1.01° Magnetic North: 9.94°

Magnetic Field Strength: 52257.6snT Dip Angle: 65.84° Date: 02/08/2012 Model: IGRF2010



REC



US ROCKIES REGION PLANNING

UTAH - UTM (feet), NAD27, Zone 12N NBU 1022-3O NBU 1022-3P4BS

OH

Plan: PLAN #1

Standard Planning Report

09 February, 2012





Project:

Site

SDI Planning Report



Database: EDM 5000.1 Single User Db
Company: US ROCKIES REGION PLANNING

UTAH - UTM (feet), NAD27, Zone 12N

 Site:
 NBU 1022-3O

 Well:
 NBU 1022-3P4BS

Wellbore: OH
Design: PLAN #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well NBU 1022-3P4BS

GL 5271 & 4 KB @ 5275.00ft (ASSUMED) GL 5271 & 4 KB @ 5275.00ft (ASSUMED)

Grid

Minimum Curvature

Project UTAH - UTM (feet), NAD27, Zone 12N

Map System: Universal Transverse Mercator (US Survey Feet)

Geo Datum: NAD 1927 (NADCON CONUS)
Map Zone: Zone 12N (114 W to 108 W)

Mean Sea Level

NBU 1022-30, SECTION 3 T10S R22E

Northing: 14,519,954.37 usft Site Position: Latitude: 39.972551 From: Lat/Long Easting: 2,082,157.19 usft Longitude: -109.423350 **Position Uncertainty:** 0.00 ft Slot Radius: **Grid Convergence:** 1.01 13.200 in

System Datum:

Well NBU 1022-3P4BS, 689 FSL 2070 FEL

 Well Position
 +N/-S
 29.42 ft
 Northing:
 14,519,983.78 usft
 Latitude:
 39.972632

 +E/-W
 -5.00 ft
 Easting:
 2,082,152.19 usft
 Longitude:
 -109.423366

Position Uncertainty0.00 ftWellhead Elevation:Ground Level:5,271.00 ft

Wellbore ОН Magnetics **Model Name** Sample Date Declination Dip Angle Field Strength (nT) (°) (°) IGRF2010 02/08/12 10.96 65.84 52.258

PLAN #1 Design Audit Notes: Version: Phase: PLAN Tie On Depth: 0.00 **Vertical Section:** Depth From (TVD) +N/-S +E/-W Direction (ft) (ft) (ft) (°) 0.00 0.00 0.00 93.08

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,543.29	24.87	93.08	1,504.63	-14.25	265.20	2.00	2.00	0.00	93.08	
4,031.72	24.87	93.08	3,762.37	-70.40	1,310.06	0.00	0.00	0.00	0.00	
5,275.02	0.00	0.00	4,967.00	-84.66	1,575.26	2.00	-2.00	0.00	180.00	
10,326.02	0.00	0.00	10,018.00	-84.66	1,575.26	0.00	0.00	0.00	0.00 F	BHL_NBU 1022-3P4



SDI Planning Report



Database: Company: Project: EDM 5000.1 Single User Db US ROCKIES REGION PLANNING UTAH - UTM (feet), NAD27, Zone 12N

 Site:
 NBU 1022-30

 Well:
 NBU 1022-3P4BS

Wellbore: OH
Design: PLAN #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well NBU 1022-3P4BS

GL 5271 & 4 KB @ 5275.00ft (ASSUMED) GL 5271 & 4 KB @ 5275.00ft (ASSUMED)

Grid

Minimum Curvature

esign:	PLAN #1								
anned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2	.00								
400.00	2.00	93.08	399.98	-0.09	1.74	1.75	2.00	2.00	0.00
500.00	4.00	93.08	499.84	-0.37	6.97	6.98	2.00	2.00	0.00
600.00	6.00	93.08	599.45	-0.84	15.67	15.69	2.00	2.00	0.00
700.00	8.00	93.08	698.70	-1.50	27.84	27.88	2.00	2.00	0.00
800.00	10.00	93.08	797.47	-2.34	43.46	43.52	2.00	2.00	0.00
900.00	12.00	93.08	895.62	-3.36	62.51	62.60	2.00	2.00	0.00
1,000.00	14.00	93.08	993.06	-4.57	84.97	85.10	2.00	2.00	0.00
1,100.00	16.00	93.08	1,089.64	-5.96	110.82	110.98	2.00	2.00	0.00
1,200.00	18.00	93.08	1,185.27	-7.52	140.01	140.21	2.00	2.00	0.00
1,272.58	19.45	93.08	1,254.00	-8.77	163.28	163.51	2.00	2.00	0.00
GREEN RIVE									
1,300.00	20.00	93.08	1,279.82	-9.27	172.52	172.77	2.00	2.00	0.00
1,400.00	22.00	93.08	1,373.17	-11.19	208.30	208.60	2.00	2.00	0.00
1,500.00	24.00	93.08	1,465.21	-13.29	247.32	247.67	2.00	2.00	0.00
1,543.29	24.87	93.08	1,504.63	-14.25	265.20	265.58	2.00	2.00	0.00
	3 hold at 1543.29		, i						
1,553.62	24.87	93.08	1,514.00	-14.49	269.53	269.92	0.00	0.00	0.00
BIRDSNEST		00.00	.,		200.00	200.02	0.00	0.00	0.00
1,600.00	24.87	93.08	1,556.08	-15.53	289.01	289.43	0.00	0.00	0.00
1,700.00	24.87	93.08	1,646.81	-17.79	331.00	331.48	0.00	0.00	0.00
1,800.00	24.87	93.08	1,737.54	-20.04	372.99	373.52	0.00	0.00	0.00
1,900.00	24.87	93.08	1,828.27	-22.30	414.98	415.57	0.00	0.00	0.00
2,000.00	24.87	93.08	1,919.00	-24.56	456.96	457.62	0.00	0.00	0.00
2,100.00	24.87	93.08	2,009.73	-26.81	498.95	499.67	0.00	0.00	0.00
2,141.08	24.87	93.08	2,047.00	-27.74	516.20	516.95	0.00	0.00	0.00
MAHOGANY	•								
2,200.00	24.87	93.08	2,100.46	-29.07	540.94	541.72	0.00	0.00	0.00
2,300.00	24.87	93.08	2,191.19	-31.33	582.93	583.77	0.00	0.00	0.00
2,400.00	24.87	93.08	2,281.92	-33.58	624.92	625.82	0.00	0.00	0.00
2,500.00	24.87	93.08	2,372.65	-35.84	666.91	667.87	0.00	0.00	0.00
2,600.00	24.87	93.08 93.08	2,463.38	-38.10 -38.93	708.90 724.46	709.92 725.50	0.00 0.00	0.00 0.00	0.00 0.00
2,637.06	24.87	93.06	2,497.00	-30.93	124.40	125.50	0.00	0.00	0.00
8 5/8"	04.07	00.00	0.554.40	40.05	750.00	754.07	0.00	0.00	0.00
2,700.00	24.87	93.08	2,554.10	-40.35	750.89	751.97	0.00	0.00	0.00
2,800.00	24.87	93.08	2,644.83	-42.61	792.88	794.02 836.07	0.00	0.00	0.00
2,900.00	24.87	93.08	2,735.56	-44.87	834.86	836.07	0.00	0.00	0.00
3,000.00	24.87	93.08	2,826.29	-47.12	876.85	878.12	0.00	0.00	0.00
3,100.00	24.87	93.08	2,917.02	-49.38	918.84	920.17	0.00	0.00	0.00
3,200.00	24.87	93.08	3,007.75	-51.64	960.83	962.22	0.00	0.00	0.00
3,300.00	24.87	93.08	3,098.48	-53.89	1,002.82	1,004.27	0.00	0.00	0.00
3,400.00	24.87	93.08	3,189.21	-56.15	1,044.81	1,046.32	0.00	0.00	0.00
3,500.00	24.87	93.08	3,279.94	-58.41	1,086.80	1,088.37	0.00	0.00	0.00
3,600.00	24.87	93.08	3,370.67	-60.66	1,128.79	1,130.42	0.00	0.00	0.00
3,700.00	24.87	93.08	3,461.40	-62.92	1,170.78	1,172.47	0.00	0.00	0.00
3,800.00	24.87	93.08	3,552.13	-65.18	1,212.76	1,214.51	0.00	0.00	0.00
3,900.00	24.87	93.08	3,642.86	-67.43	1,254.75	1,256.56	0.00	0.00	0.00
4,000.00	24.87	93.08	3,733.59	-69.69 -70.40	1,296.74	1,298.61	0.00	0.00	0.00
4,031.72	24.87	93.08	3,762.37	-70.40	1,310.06	1,311.95	0.00	0.00	0.00



SDIPlanning Report



Database: Company: Project: EDM 5000.1 Single User Db US ROCKIES REGION PLANNING UTAH - UTM (feet), NAD27, Zone 12N

 Site:
 NBU 1022-30

 Well:
 NBU 1022-3P4BS

Wellbore: OH
Design: PLAN #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well NBU 1022-3P4BS

GL 5271 & 4 KB @ 5275.00ft (ASSUMED) GL 5271 & 4 KB @ 5275.00ft (ASSUMED)

Grid

Minimum Curvature

Design:		PLAN #1								
Planned	Survey									
	Measured			Vertical			Vertical	Dogleg	Build	Turn
	Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Section	Rate	Rate	Rate
	(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)
	Start Drop -2.	.00								
	4,100.00	23.50	93.08	3,824.65	-71.91	1,337.99	1,339.92	2.00	-2.00	0.00
	4,200.00	21.50	93.08	3,917.04	-73.96	1,376.20	1,378.19	2.00	-2.00	0.00
	4,300.00	19.50	93.08	4,010.70	-75.84	1,411.17	1,413.21	2.00	-2.00	0.00
	4,400.00	17.50	93.08	4,105.53	-77.54	1,442.86	1.444.94	2.00	-2.00	0.00
	4,500.00	15.50	93.08	4,201.40	-79.06	1,471.22	1,473.34	2.00	-2.00	0.00
	4,600.00	13.50	93.08	4,298.21	-80.41	1,496.22	1,498.38	2.00	-2.00	0.00
	4,670.54	12.09	93.08	4,367.00	-81.25	1,511.82	1,514.00	2.00	-2.00	0.00
	WASATCH									
	4,700.00	11.50	93.08	4,395.84	-81.57	1,517.83	1,520.02	2.00	-2.00	0.00
	4,800.00	9.50	93.08	4,494.16	-82.55	1,536.03	1,538.24	2.00	-2.00	0.00
	4,900.00	7.50	93.08	4,593.05	-83.34	1,550.79	1,553.02	2.00	-2.00	0.00
	5,000.00	5.50	93.08	4,692.41	-83.95	1,562.09	1,564.34	2.00	-2.00	0.00
	5,100.00	3.50	93.08	4,792.09	-84.37	1,569.92	1,572.19	2.00	-2.00	0.00
	5,200.00	1.50	93.08	4,891.99	-84.60	1,574.28	1,576.55	2.00	-2.00	0.00
	5,275.02	0.00	0.00	4,967.00	-84.66	1,575.26	1,577.53	2.00	-2.00	0.00
		hold at 5275.02		1,007.00	01.00	1,070.20	1,077.00	2.00	2.00	0.00
	5,300.00	0.00	0.00	4,991.98	-84.66	1,575.26	1,577.53	0.00	0.00	0.00
	5,400.00	0.00	0.00	5,091.98	-84.66	1,575.26	1,577.53	0.00	0.00	0.00
	5,500.00	0.00	0.00	5,191.98	-84.66	1,575.26	1,577.53	0.00	0.00	0.00
	5,600.00	0.00	0.00	5,291.98	-84.66	1,575.26	1,577.53	0.00	0.00	0.00
	5,700.00	0.00	0.00	5,391.98	-84.66	1,575.26	1,577.53	0.00	0.00	0.00
	5,800.00	0.00	0.00	5,491.98	-84.66	1,575.26	1,577.53	0.00	0.00	0.00
	5,900.00	0.00	0.00	5,591.98	-84.66	1,575.26	1,577.53	0.00	0.00	0.00
	6,000.00	0.00	0.00	5,691.98	-84.66	1,575.26	1,577.53	0.00	0.00	0.00
	6,100.00	0.00	0.00	5,791.98	-84.66	1,575.26	1,577.53	0.00	0.00	0.00
	6,200.00	0.00	0.00	5,891.98	-84.66	1,575.26	1,577.53	0.00	0.00	0.00
	6,300.00	0.00	0.00	5,991.98	-84.66	1,575.26	1,577.53	0.00	0.00	0.00
	6,400.00	0.00	0.00	6,091.98	-84.66	1,575.26	1,577.53	0.00	0.00	0.00
	6,500.00	0.00	0.00	6,191.98	-84.66	1,575.26	1,577.53	0.00	0.00	0.00
	6,600.00	0.00	0.00	6,291.98	-84.66	1,575.26	1,577.53	0.00	0.00	0.00
	6,700.00	0.00	0.00	6,391.98	-84.66	1,575.26	1,577.53	0.00	0.00	0.00
	6,800.00	0.00	0.00	6,491.98	-84.66	1,575.26	1,577.53	0.00	0.00	0.00
	6,900.00	0.00	0.00	6,591.98	-84.66	1,575.26	1,577.53	0.00	0.00	0.00
	6,987.02	0.00	0.00	6,679.00	-84.66	1,575.26	1,577.53	0.00	0.00	0.00
	MESAVERDE									
	7,000.00	0.00	0.00	6,691.98	-84.66	1,575.26	1,577.53	0.00	0.00	0.00
	7,100.00	0.00	0.00	6,791.98	-84.66	1,575.26	1,577.53	0.00	0.00	0.00
	7,200.00	0.00	0.00	6,891.98	-84.66	1,575.26	1,577.53	0.00	0.00	0.00
	7,300.00	0.00	0.00	6,991.98	-84.66	1,575.26	1,577.53	0.00	0.00	0.00
	7,400.00	0.00	0.00	7,091.98	-84.66	1,575.26	1,577.53	0.00	0.00	0.00
	7,500.00	0.00	0.00	7,191.98	-84.66	1,575.26	1,577.53	0.00	0.00	0.00
	7,600.00	0.00	0.00	7,291.98	-84.66	1,575.26	1,577.53	0.00	0.00	0.00
	7,700.00	0.00	0.00	7,391.98	-84.66	1,575.26	1,577.53	0.00	0.00	0.00
	7,800.00	0.00	0.00	7,491.98	-84.66	1,575.26	1,577.53	0.00	0.00	0.00
	7,900.00	0.00	0.00	7,591.98	-84.66	1,575.26	1,577.53	0.00	0.00	0.00
	8,000.00	0.00	0.00	7,691.98	-84.66	1,575.26	1,577.53	0.00	0.00	0.00
	8,100.00	0.00	0.00	7,791.98	-84.66	1,575.26	1,577.53	0.00	0.00	0.00
	8,200.00	0.00	0.00	7,891.98	-84.66	1,575.26	1,577.53	0.00	0.00	0.00
	8,300.00	0.00	0.00	7,991.98	-84.66	1,575.26	1,577.53	0.00	0.00	0.00
	8,400.00	0.00	0.00	8,091.98	-84.66	1,575.26	1,577.53	0.00	0.00	0.00
	8,500.00	0.00	0.00	8,191.98	-84.66	1,575.26	1,577.53	0.00	0.00	0.00
	8,600.00	0.00	0.00	8,291.98	-84.66	1,575.26	1,577.53	0.00	0.00	0.00



SDIPlanning Report



Database: Company: Project:

Site:

Well:

EDM 5000.1 Single User Db US ROCKIES REGION PLANNING

UTAH - UTM (feet), NAD27, Zone 12N NBU 1022-3O NBU 1022-3P4BS

Wellbore: OH
Design: PLAN #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well NBU 1022-3P4BS

GL 5271 & 4 KB @ 5275.00ft (ASSUMED) GL 5271 & 4 KB @ 5275.00ft (ASSUMED)

Grid

Minimum Curvature

Measured Depth Inclination Azimuth Depth (ft) (ft)
Depth
8,800.00 0.00 0.00 0.00 8,491.98 -84.66 1,575.26 1,577.53 0.00 0.00 0.00 8,900.00 0.00 0.00 8,591.98 -84.66 1,575.26 1,577.53 0.00 0.00 0.00 0.00 9,000.00 0.00 0.00
9,125.02 0.00 0.00 8,817.00 -84.66 1,575.26 1,577.53 0.00 0.00 0.00 SEGO - SEGO_NBU 1022-3P4BS 9,200.00 0.00 0.00 8,981.98 -84.66 1,575.26 1,577.53 0.00 0.00 0.00 0.00 9.00 0
9,200.00
9,294.02 0.00 0.00 8,986.00 -84.66 1,575.26 1,577.53 0.00 0.00 0.00 CASTLEGATE 9,300.00 0.00 0.00 8,991.98 -84.66 1,575.26 1,577.53 0.00 0.00 0.00 9,400.00 0.00 0.00 9,091.98 -84.66 1,575.26 1,577.53 0.00 0.00 0.00 9,500.00 0.00 0.00 9,191.98 -84.66 1,575.26 1,577.53 0.00 0.00 0.00 9,600.00 0.00 0.00 9,291.98 -84.66 1,575.26 1,577.53 0.00 0.00 0.00 9,700.00 0.00 0.00 9,391.98 -84.66 1,575.26 1,577.53 0.00 0.00 0.00 9,726.02 0.00 0.00 9,418.00 -84.66 1,575.26 1,577.53 0.00 0.00 0.00 BLACKHAWK 9,800.00 0.00 0.00 9,491.98 -84.66
9,300.00 0.00 0.00 8,991.98 -84.66 1,575.26 1,577.53 0.00 0.00 0.00 9,400.00 0.00 0.00 0.00 0.00 0.00 0.00 0.
9,400.00 0.00 0.00 9,091.98 -84.66 1,575.26 1,577.53 0.00 0.00 0.00 9,500.00 0.00 0.00 9,191.98 -84.66 1,575.26 1,577.53 0.00 0.00 0.00 0.00 9,600.00 0.00 0.00 9,291.98 -84.66 1,575.26 1,577.53 0.00 0.00 0.00 0.00 9,700.00 0.00 0.00 9,391.98 -84.66 1,575.26 1,577.53 0.00 0.00 0.00 0.00 9,726.02 0.00 0.00 9,418.00 -84.66 1,575.26 1,577.53 0.00 0.00 0.00 0.00 0.00 9,418.00 -84.66 1,575.26 1,577.53 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0
9,500.00 0.00 0.00 9,191.98 -84.66 1,575.26 1,577.53 0.00 0.00 0.00 9,600.00 0.00 0.00 9,291.98 -84.66 1,575.26 1,577.53 0.00 0.00 0.00 0.00 9,700.00 0.00 0.00 9,391.98 -84.66 1,575.26 1,577.53 0.00 0.00 0.00 0.00 9,726.02 0.00 0.00 9,418.00 -84.66 1,575.26 1,577.53 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0
9,800.00 0.00 0.00 9,491.98 -84.66 1,575.26 1,577.53 0.00 0.00 0.00 9,900.00 0.00 <td< td=""></td<>
9,900.00 0.00 0.00 9,591.98 -84.66 1,575.26 1,577.53 0.00 0.00 0.00 0.00 10,000.00 0.00 0.00 9,691.98 -84.66 1,575.26 1,577.53 0.00 0.00 0.00 0.00 10,100.00 0.00 0.00 9,791.98 -84.66 1,575.26 1,577.53 0.00 0.00 0.00 0.00 10,200.00 0.00 0.00 9,891.98 -84.66 1,575.26 1,577.53 0.00 0.00 0.00 10,300.00 0.00 0.00 9,991.98 -84.66 1,575.26 1,577.53 0.00 0.00 0.00 10,326.02 0.00 0.00 10,018.00 -84.66 1,575.26 1,577.53 0.00 0.00 0.00
10,326.02 0.00 0.00 10,018.00 -84.66 1,575.26 1,577.53 0.00 0.00 0.00
TD at 10326.02 - PBHL_NBU 1022-3P4BS

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SEGO_NBU 1022-3P4B - plan hits target cen - Circle (radius 25.00		0.00	8,817.00	-84.66	1,575.26	14,519,899.13	2,083,727.44	39.972323	-109.417751
PBHL_NBU 1022-3P4Bs - plan hits target cen - Circle (radius 100.0	ter	0.00	10,018.00	-84.66	1,575.26	14,519,899.13	2,083,727.44	39.972323	-109.417751

Casing Points					
	Measured	Vertical		Casing	Hole
	Depth	Depth		Diameter	Diameter
	(ft)	(ft)	Name	(in)	(in)
	2,637.06	2,497.00 8	/8"	8.625	11.000



SDIPlanning Report



Database: Company: Project: EDM 5000.1 Single User Db US ROCKIES REGION PLANNING

UTAH - UTM (feet), NAD27, Zone 12N

 Site:
 NBU 1022-30

 Well:
 NBU 1022-3P4BS

Wellbore: OH
Design: PLAN #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well NBU 1022-3P4BS

GL 5271 & 4 KB @ 5275.00ft (ASSUMED) GL 5271 & 4 KB @ 5275.00ft (ASSUMED)

Grid

Minimum Curvature

ions						
	Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
	1,272.58	1,254.00	GREEN RIVER			
	1,553.62	1,514.00	BIRDSNEST			
	2,141.08	2,047.00	MAHOGANY			
	4,670.54	4,367.00	WASATCH			
	6,987.02	6,679.00	MESAVERDE			
	9,125.02	8,817.00	SEGO			
	9,294.02	8,986.00	CASTLEGATE			
	9,726.02	9,418.00	BLACKHAWK			

Plan Annotations				
Measured	Vertical	Local Coor	dinates	
Depth	Depth	+N/-S	+E/-W	
(ft)	(ft)	(ft)	(ft)	Comment
300.00	300.00	0.00	0.00	Start Build 2.00
1,543.29	1,504.63	-14.25	265.20	Start 2488.43 hold at 1543.29 MD
4,031.72	3,762.37	-70.40	1,310.06	Start Drop -2.00
5,275.02	4,967.00	-84.66	1,575.26	Start 5051.00 hold at 5275.02 MD
10,326.02	10,018.00	-84.66	1,575.26	TD at 10326.02

NBU 1022-301CS/ 1022-304BS/ 1022-304CS/ 1022-3P1CS/ 1022-3P4BS/ 1022-3P4CS Surface Use Plan of Operations 1 of 13

Kerr-McGee Oil & Gas Onshore. L.P.

NBU 1022-30 Pad

<u>API #</u>	ľ	NBU 1022-3O1CS		
	Surface: BHL:	709 FSL / 2073 FEL 746 FSL / 1819 FEL	SWSE SWSE	Lot Lot
API #4304750168	ľ	NBU 1022-3O4BS		
	Surface: BHL:	670 FSL / 2067 FEL 421 FSL / 1847 FEL	SWSE SWSE	Lot Lot
API#	ľ	NBU 1022-3O4CS		
	Surface: BHL:	660 FSL / 2065 FEL 106 FSL / 1825 FEL	SWSE SWSE	Lot Lot
<u>API #</u>	ľ	NBU 1022-3P1CS		
	Surface: BHL:	699 FSL / 2072 FEL 909 FSL / 494 FEL	SWSE SESE	Lot Lot
API #4304750173	ľ	NBU 1022-3P4BS		
	Surface: BHL:	689 FSL / 2070 FEL 575 FSL / 496 FEL	SWSE SESE	Lot Lot
<u>API #</u>	ľ	NBU 1022-3P4CS		
	Surface: BHL:	680 FSL / 2069 FEL 256 FSL / 500 FEL	SWSE SESE	Lot Lot

This Surface Use Plan of Operations (SUPO) or 13-point plan provides site-specific information for the above-referenced wells.

In accordance with Utah Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling, these wells will be directionally drilled. Refer to Topo Map A for directions to the location and Topo Maps A and B for location of access roads within a 2-mile radius.

An on-site meeting was held on December 6, 2011. Present were:

- · David Gordon, Tyler Cox BLM;
- · Jacob Dunham 609 Consulting;
- John Slaugh, Mitch Batty Timberline Engineering & Land Surveying, Inc.; and
- · Gina Becker, Charles Chase, Doyle Holmes, Casey McGee, Grizz Oleen, Sheila Wopsock Kerr-McGee

A. Existing Roads:

Existing roads consist of county and improved/unimproved access roads (two-tracks). In accordance with Onshore Order #1, Kerr-McGee will, in accordance with BMPs, improve or maintain existing roads in a condition that is the same as or better than before operations began. New or reconstructed proposed access roads are discussed in Section B.

The existing roads will be maintained in a safe and usable condition. Maintenance for existing roads will continue until final abandonment and reclamation of well pads and/or other facilities, as applicable. Road maintenance will include, but is not limited to, blading, ditching, and/or culvert installation and cleanout. To ensure safe operating conditions, gravel surfacing will be performed where excessive rutting or erosion may occur. Dust control will be performed as necessary to ensure safe operating conditions.

Roads, gathering lines and electrical distribution lines will occupy common disturbance corridors where possible. Where available, roadways will be used as the staging area and working space for installation of gathering lines. All

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disturbances located in the same corridor will overlap each other to the maximum extent possible, while maintaining safe and sound construction and installation practices. Unless otherwise approved or requested in site specific documents, in no case will the maximum disturbance widths of the access road and utility corridors exceed the widths specified in Part D of this document.

Please refer to Topo B, for existing roads.

B. New or Reconstructed Access Roads:

All new or reconstructed roads will be located, designed, and maintained to meet the standards of the BLM. BMPs. Described in the BLM's Surface Operating Standards for Oil and Gas Exploration and Development, 4th Edition (Gold Book) (USDI and USDA, 2007) and/or BLM Manual Section 9113 (1985) will be considered in consultation with the BLM in the design, construction, improvement and maintenance of all new or reconstructed roads. If a new road would cross a water of the United States, Kerr-McGee will adhere to the requirements of applicable Nationwide Permits of the Department of Army Corps of Engineers.

Each new well pad or pad expansion may require construction of a new access road and/or de-commissioning of an older road. Plans, routes, and distances for new roads and road improvements are provided in design packages, exhibits and maps for a project. Project-specific maps are submitted to depict the locations of existing, proposed, and/or decommissioned and include the locations for supporting structures, including, but not limited to, culverts, bridges, low water crossings, range infrastructure, and haul routes, as per OSO 1. Designs for cuts and fills, including spoils source and storage areas, are provided with the road designs, as necessary.

Where safety objectives can be met. As applicable, Kerr-McGee may use unimproved and/or two-track roads for lease operations, to lessen total disturbance.

Road designs will be based on the road safety requirements, traffic characteristics, environmental conditions, and the vehicles the road is intended to carry. Generally, newly constructed unpaved lease roads will be crowned and ditched with the running surfaces of the roads approximately 12-18 feet wide and a total road corridor width not to exceed 45 feet, except where noted in the road design for a specific project. Maximum grade will generally not exceed 8%. Borrow ditches will be back sloped 3:1 or less. Construction BMPs will be employed to control onsite and offsite erosion.

Where topography would direct storm water runoff to an access road or well pad, drainage ditches or other common drainage control facilities, such as V- or wing-ditches, will be constructed to divert surface water runoff. Drainage features, including culverts, will be constructed or installed prior to commencing other operations, including drilling or facilities placement. Riprap will be placed at the inlet and outlet at the culvert(s), as necessary.

Prior to construction, new access road(s) will be staked according to the requirements of OSO 1. Construction activity will not be conducted using frozen or saturated materials or during periods when significant watershed damage (e.g. rutting, extensive sheet soil erosion, formation of rills/gullies, etc.) is likely to occur. Vegetative debris will not be placed in or under fill embankments.

New road maintenance will include, but is not limited to, blading, ditching, culvert installation and cleanout, gravel surfacing where excessive rutting or erosion may occur and dust control, as necessary to ensure safe operating conditions. All vehicular traffic, personnel movement, construction/restoration operations will be confined to the approved area and to existing roadways and/or access routes.

Snow removal will be conducted on an as-needed basis to accommodate safe travel. Snow removal will occur as necessary throughout the year, as will necessary drainage ditch construction. Removed snow may be stored on permitted well pads to reduce hauling distances and/or at the aerial extent of approved disturbance boundaries to facilitate snow removal for the remainder of the season.

If a county road crossing or encroachment permit is needed, it will be obtained prior to construction.

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The following segments are "on-lease"

±740' (0.14 miles) – Section 3 T10S R22E (SW/4 SE/4) – On-lease UTU01191, from the eastern edge of the pad re-routing northwesterly to merge with the existing access road. Please refer to Topo B and requested Engineered Road Designs. (Attached to APD)

C. Location of Existing Wells:

Refer to Topo Map C.

Location of Existing and/or Proposed Facilities:

This pad will expand the existing pad for the NBU 290, which is a producing gas well according to Utah Division of Oil, Gas and Mining (UDOGM) records on February 14, 2012. Gathering (pipeline) infrastructure will be utilized to collect and transport gas and fluids from the wells which are owned and operated by Kerr McGee Oil and Gas Onshore LP (Kerr-McGee).

Should the well(s) prove productive, production facilities will be installed on the disturbed portion of each well pad. A berm will be constructed completely around production components (typically excluding dehy's and/or separators) that contain fluids (i.e. production tanks, produced liquids tanks). The berms will generally be constructed of compacted subsoil or corrugated metal, and will hold the capacity of the largest tank and have sufficient freeboard to accomodate a 25 year rainfall event. This includes pumping units. Aboveground structures constructed or installed onsite for 6 months or longer, will be painted a flat, non-reflective, earth-tone color chosen at the onsite in coordination with the BLM (typically Shadow Gray). A production facility layout is provided as part of a project-specific APD, ROW or NOS submission.

GAS GATHERING
Please refer to Exhibit A and Topo D2- Pad and Pipeline Detail.

The gas gathering pipeline material: Steel line pipe. Surface = Bare pipe. Buried = Coated with fusion bonded epoxy coating (or equivalent). The total gas gathering pipeline distance from the meter to the tie in point is $\pm 6,185$ ° and the individual segments are broken up as follows:

The following segments are "onlease", no ROW needed.

- ±430' (0.08 miles) Section 3 T10S R22E (SW/4 SE/4) On-lease UTU-01191A, BLM surface, New 10" buried gas gathering pipeline from the meter to the edge of the pad. Please refer to Topo D2 - Pad and Pipeline Detail.
- ±915' (0.17 miles) Section 3 T10S R22E (SW/4 SE/4) On-lease UTU-01191A, BLM surface, New 10" buried gas gathering pipeline from the edge of the pad to tie-in to the proposed 10" gas gathering pipeline at the NBU 1022-3J intersection. Please refer to Exhibit A, Line 6.
- ±610' (0.12 miles) Section 3 T10S R22E (NE/4 SW/4) On-lease UTU-01191, BLM surface, New 10" buried gas gathering pipeline from the NBU 1022-3J intersection to tie-in to the proposed 16" buried gas gathering pipeline at the NBU 1022-3K pad. This pipeline will be used concurrently with the NBU 1022-3J Pad. Please refer to Exhibit A, Line 4.
- ±2, 055' (0.39 miles) Section 3 T10S R22E (N/2 SW/4) On-lease UTU-01191, BLM surface, New 16" buried gas gathering pipeline from the NBU 1022-3K to the NBU 1022-3M intersection. This pipeline will be used concurrently with the NBU 1022-3J and NBU 1022-3K pads. Please refer to Exhibit A, Line 3.
- ±1,640' (0.31 miles) Section 3 T10S R22E (NW/4 SW/4) On-lease UTU-01191, BLM surface, New 16" buried gas gathering pipeline from the NBU 1022-3M intersection with a short westerly bend into 10S, 22E, Section 4, then northeasterly to the NBU 1022-3L intersection in 10S, 22E, Section 3. This pipeline will be used concurrently with the NBU 1022-3J, NBU 1022-3K and NBU 1022-3M pads. Please refer to Exhibit A, Line 2.

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±535' (0.1 miles) – Section 3 T10S R22E (NW/4 SW/4) – On-lease UTU-01191, BLM surface, New 16" buried gas gathering pipeline from the NBU 1022-3L intersection to tie-in to the approved 16" gas pipeline located in 10S, 22E, Section 4. This pipeline will be used concurrently with the NBU 1022-3J, NBU 1022-3K, NBU 1022-3M and NBU 1022-3L pads. Please refer to Exhibit A, Line 1.

LIQUID GATHERING

Please refer to Exhibit B and Topo D2- Pad and Pipeline Detail.

The total liquid gathering pipeline distance from the separator to the tie in point is $\pm 6,185$ ' and the individual segments are broken up as follows:

The following segments are "onlease", no ROW needed.

- ±430' (0.08 miles) Section 3 T10S R22E (SW/4 SE/4) On-lease UTU-01191A, BLM surface, New 6" buried liquid gathering pipeline from the separator to the edge of the pad. Please refer to Topo D Pad and Pipeline Detail.
- ±915' (0.17 miles) Section 3 T10S R22E (SW/4 SE/4) On-lease UTU-01191A, BLM surface, New 6" buried liquid gathering pipeline from the edge of the pad to tie-in to the NBU 1022-3J intersection. Please refer to Exhibit B, Line 6.
- ±610' (0.12 miles) Section 3 T10S R22E (NE/4 SW/4) On-lease UTU-01191, BLM surface, New 6" buried liquid gathering pipeline from the NBU 1022-3J intersection to tie-in to the proposed 6" buried liquid gathering pipeline at the NBU 1022-3K pad. This pipeline will be used concurrently with the NBU 1022-3J Pad. Please refer to Exhibit B, Line 4.
- ±2,055' (0.39 miles) Section 3 T10S R22E (N/2 SW/4) On-lease UTU-01191, BLM surface, New 6" buried liquid gathering pipeline from the NBU 1022-3K to the NBU 1022-3M intersection. This pipeline will be used concurrently with the NBU 1022-3J and NBU 1022-3K pads. Please refer to Exhibit B, Line 3.
- ±1,640' (0.31 miles) Section 3 T10S R22E (NW/4 SW/4) On-lease UTU-01191, BLM surface, New 6" buried liquid gathering pipeline from the NBU 1022-3M intersection with a short westerly bend into 10S, 22E, Section 4, then northeasterly to the NBU 1022-3L intersection in 10S, 22E, Section 3. This pipeline will be used concurrently with the NBU 1022-3J, NBU 1022-3K and NBU 1022-3M pads. Please refer to Exhibit B, Line 2.
- ±535' (0.1 miles) Section 3 T10S R22E (NW/4 SW/4) On-lease UTU-01191, BLM surface, New 6" buried liquid gathering pipeline from the NBU 1022-3L intersection to tie-in to the approved liquid pipeline located in 10S, 22E, Section 4. This pipeline will be used concurrently with the NBU 1022-3J, NBU 1022-3K, NBU 1022-3M and NBU 1022-3L pads. Please refer to Exhibit B, Line 1.

Pipeline Gathering Construction

Gathering (pipeline) infrastructure will be utilized to collect and transport gas and fluids from the wells which are owned and operated by Kerr McGee. Gas gathering pipeline(s,) gas lift, or liquids pipelines may be constructed to lie on the surface or be buried. Where the pipeline is adjacent to the road or well pad, the road and/or well pad will be utilized for construction activities and staging. The area of disturbance during construction from the edge of road or well pad will typically be 30' in width. Where pipelines run cross country, the width of disturbance will typically be 45 ft for buried lines and 30 ft for surface lines. In addition, Kerr-McGee requests for a permanent 30' distrubance width that will be maintained for the portion adjacent to the road. The need for the 30' permanent distrubance width is for maintenance and repairs. Cross country permanent distrubance width also are required to be 30ft.

Above-ground installation will generally not require clearing of vegetation or blading of the surface, except where safety considerations necessitate earthwork. In some surface pipeline installation instances pipe cannot be constructed where it will lay. In these cases where an above-ground pipeline is constructed parallel and adjacent to a road, it will be welded/fused on the road and then lifted from the road to the pipeline route. In other cases where a pipeline route is not parallel and adjacent to a road (cross-country between sites), it will be welded/fused in place at a well pad, access road, or designated work area and pulled between connection locations with a suitable piece of equipment.

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Buried pipelines will generally be installed parallel and adjacent to existing and/or newly constructed roads and within the permitted disturbance corridor. Buried pipelines may vary from 2 inches (typically fuel gas lines) to 24 inches (typically transportation lines) in diameter, but 6 to 16 inches is typical for a buried gas line. The diameter of liquids pipelines may vary from 2 inches to 12 inches, but 6 inches is the typical diameter. Gas lift lines may vary from 2 to 12 inches in diameter, but 6-inch diameter pipes are generally used for gas lift. If two or more pipelines are present (gas gathering, gas lift, and fluids), they will share a common trench where possible.

Typically, to install a buried pipeline, topsoil will be removed, windrowed and placed on the non-working side of the route for later reclamation. Because working room is limited, the spoil may be spread out across the working side and construction will take place on the spoil. The working side of the corridor will be used for pipe stringing, bending, welding and equipment travel. Small areas on the working side displaying ruts or uneven ground will be groomed to facilitate the safe passage of equipment. After the pipelines are installed, spoil will be placed back into the trench, and the topsoil will be redistributed over the disturbed corridor prior to final reclamation. Typical depth of the trench will be 6 feet, but depths may vary according to site-specific conditions (presence of bedrock, etc.). The proposed trench width for the pipeline would range from 18-48 inches.

The pipeline will be welded along the proposed route and lowered into place. Trenching equipment will cut through the soil or into the bedrock and create good backfill, eliminating the need to remove large rocks. The proposed buried pipeline will be visually and radiographically inspected and the entire pipeline will be pneumatically or hydrostatically tested before being placed into service. Routine vehicle traffic will be prevented from using pipeline routes as travel ways by posting signs at the route's intersection with an access road.

The liquid gathering lines will be made of polyethylene or a composite polyethylene/steel or polyethylene/fiberglass that is not subject to internal or external pipe corrosion. The content of the produced fluids to be transferred by the liquid gathering system will be approximately 92% produced water and 8% condensate. Trunk line valve connections for the water gathering system will be below ground but accessible from the surface in order to prevent freezing during winter time.

If pipelines or roads encounter a drainage that could be subject to flooding or surface water during extreme precipitation events, Kerr-McGee will apply all applicable Army Corps mandates as well as the BLM's Hydraulic Considerations for Pipeline Crossings of Stream Channels (BLM Technical Note 423, April 2007). In addition, all stream and drainage crossings will be evaluated to determine the need for stream alteration permits from the State of Utah Division of Water Rights and if necessary, required permits will be secured. Similarly, where a road or pipeline crossing exists the pipe will be butt welded and buried to a depth between 24 and 48 inches or more. Dirt roads will be cut and restored to a condition equivalent to the existing condition. All Uintah County road encroachment and crossing permits, where applicable, will be obtained prior to crossing construction. In no case will pressure testing of pipelines result in discharge of liquids to the surface.

Pipeline signs will be installed along the route to indicate the pipeline proximity, ownership, and to provide emergency contact phone numbers. Above ground valves and lateral T's will be installed at various locations for production integrity and safety purposes.

Upon completion of the proposed buried pipeline, the entire area of disturbance will be reclaimed to the standards proposed in the Green River District Reclamation Guidelines. Please refer to section J for more details regarding final reclamation.

When no longer deemed necessary by the operator, Kerr-McGee or it's successor will consult with the BLM, Vernal Field Office before terminating of the use of the pipeline(s).

The Anadarko Completions Transportation System (ACTS) information:

Please refer to Exhibit C for ACTs Lines

Kerr-McGee will use either a closed loop drilling system that will require one pit and one storage area to be constructed on the drilling pad or a traditional drilling operation with one pit. The storage area will be used to contain only the de-watered drill cuttings and will be lined and reclaimed according to traditional pit closure standards. The pit will be constructed to

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allow for completion operations. The completion operations pit is lined and will be used for the wells drilled on the pad or used as part of our Anadarko Completions Transportation (ACTS) system which is disussed in more detail below. Using the closed loop drilling system will allow Kerr-McGee to decrease the amount of disturbance/footprint on location compared to a single large drilling/completion pit.

If Kerr-McGee does not use a closed loop system, it will construct a drilling reserve pit to contain drill cuttings and for use in completion operations. Depending on the location of the pit, its relation to future drilling locations, the reserve/completion pit will be utilized for the completion of the wells on that pad and/or be used as part of our ACTS system.

Kerr-McGee will use ACTS to optimize the completion processes for multiple pads across the project area which may include up to a section of development. ACTS will facilitate management of frac fluids by utilizing existing reserve pits and temporary, surface-laid aluminum liquids transfer lines between frac locations. The pit will be refurbished as follows when a traditional drill pit is used: mix and pile up drill cuttings with dry dirt, bury the original liner in the pit, walk bottom or pit with cat. Kerr-McGee will reline the pit with a 30 mil liner and double felt padding. The refurbished pit will be the same size or smaller as specified in the originally approved ROW/APD. The pit refurb will be done in a normal procedure and there will be no modification to the pit.

All four sides of the completions pit will be fenced in according to standard pit fencing procedures. Netting will be installed over all pits.

Any hydrocarbons collected will be treated and sold at approved sales facilities. A loading rack with drip containment will also be installed where water trucks would unload and load to prevent damage caused from pulling hoses in and out of the pit .

ACTS will require temporarily laying multiple 6" aluminum water transfer lines on the surface between either existing or refurbished reserve pits. Please see the attached ACTS exhibit C for placement of the proposed temporary lines. The temporary aluminum transfer lines will be utilized to transport frac fluid being injected and/or recovered during the completion process and will be laid adjacent to existing access roads or pipeline corridors. Upon completion of the frac operation, the liquids transfer lines will be flushed with fresh water and purged with compressed air. The contents of the transfer lines will be flushed into a water truck for delivery to another ACTS location or a reserve pit.

The volume of frac fluid transported through a water transfer line will vary, but volume is projected to be approximately 1.75 bbls per 50-foot joint. Although the maximum working pressure is 125 psig, the liquids transfer lines will be operated at a pressure of approximately 30 to 40 psig. Kerr-McGee requests to keep the netted pit open for one year from first production of the first produced well on the pad. During this time the surrounding well location completion fluids may be recycled in this pit and utilized for other frac jobs in the area. After one year Kerr-McGee will backfill the pit and reclaim. If the pit is not needed for an entire year it will be backfilled and reclaimed earlier. Kerr-McGee understands that due to the temporary nature of this system, BLM considers this a casual use situation; therefore, no permanent ROW or temporary use plan will need to be issued by the BLM.

E. Location and Types of Water Supply:

Water for drilling and completion operations will be obtained from the following sources:

Permit # 49-2307	JD Field Services	Green River- Section 15, T2N, R22E
Permit # 49-2321	R.N. Industries	White River- Section 2, T10S, R24E
Permit # 49-2319	R.N. Industries	White River- Various Sources
Permit # 49-2320	R.N. Industries	Green River- Section 33, T8S, R23E

Water will be hauled to location over the roads marked on Maps A and B.

No water well is to be drilled on this lease.

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F. Construction Materials:

Construction operations will typically be completed with native materials found on location. Construction materials that must be imported to the site (mineral material aggregate, soils or materials suitable for fill/surfacing) will be obtained from a nearby permitted source (described in site-specific documents). No construction materials will be removed from federal lands without prior approval from the BLM. A source location other than an on-location construction site will be designated either via a map or narrative within the project specific materials provided to the BLM.

G. Methods for Handling Waste:

All wastes subject to regulation will be handled in compliance with applicable laws to minimize the potential for leaks or spills to the environment. Kerr-McGee also maintains a Spill Control and Countermeasure Plan, which includes notification requirements, including the BLM, for all reportable spills of oil, produced liquids, and hazardous materials.

Any accidental release, such as a leak or spill in excess of the reportable quantity, as established by 40 CFR Part 117.3, will be reported as per the requirements of CERCLA, Section 102 B. If a release involves petroleum hydrocarbons or produced liquids, Kerr-McGee will comply with the notification requirements of NTL-3A. Drill cuttings and/or drilling fluids will be contained in the reserve/frac pit whether a closed loop system is used or not. Cuttings will be buried in pit(s) upon closure. Unless specifically approved by the BLM, no oil or other oil-based drilling additives, chromium/metals-based, or saline muds will be used during drilling. Only fresh water (as specified above), biodegradable polymer soap, bentonite clay, and/or non-toxic additives will be used in the mud system.

Pits will be constructed to minimize the accumulation of surface precipitation runoff into the pit (via appropriate placement of subsoil storage areas and/or construction of berms, ditches, etc). Should unexpected liquid petroleum hydrocarbons (crude oil or condensate) be encountered during drilling, completions or well testing, liquid petroleum hydrocarbons will either be contained in test tanks on the well site or evacuated by vacuum trucks and transported to an approved disposal/sales facility. Should petroleum hydrocarbons unexpectedly be released into a reserve/completion pit, they will be removed as soon as practical but in no case will they remain longer than 72 hours unless an alternate is approved by the BLM. Should timely removal not be feasible, the pit will be netted as soon as practical. Similarly, hydrocarbon removal will take place prior to the closure of the pit, unless authorization is provided for disposal via alternate pit closure methods (e.g. solidification).

The reserve and/or fracture stimulation pit will be lined with an impermeable liner. The liner will be a synthetic material 30 mil or thicker. The bottom and side walls of the pit will be void of any sharp rocks that could puncture the liner. The liner will be installed over smooth fill subgrade that is free of pockets, loose rocks, or other materials (i.e. sand, sifted dirt, bentonite, straw, etc.) that could damage the liner. After evaporation and when dry, the reserve pit liners will be cut off, ripped and/or folded back (as safety considerations allow) as near to the mud surface as possible and buried on location or hauled to a landfill prior to backfilling the pit with a minimum of five feet of soil material.

Where necessary and if conditions (freeboard, etc.) allow, produced liquids from newly completed wells may be temporarily disposed of into pits for a period not to exceed 90 days as per Onshore Order Number 7 (OSO 7). Subsequently, permanent approved produced water disposal methods will be employed in accordance with OSO 7 and/or as described in a Water Management Plan (WMP). Otherwise, fluids disposal locations and associated haul routes, for ROW consideration, are typically depicted on Topo A of individual projects. Revisions to the water source or method of transportation will be subject to written approval from the BLM.

Any additional pits necessary for subsequent operations, such as temporary flare or workover pits, will be contained within the originally approved well pad and disturbance boundaries. Such temporary pits will be backfilled and reclaimed within 180 days of completion of work at a well location.

Pits containing drilling cuttings, mud, and/or completions fluids will be allowed to dry. Any free fluids remaining after one year from reaching total depth, date of completion, and/or determination of inactivity will be removed (as weather conditions allow) to an approved site and the pit reclaimed. Installation and operation of any sprinklers, pumps, and equipment will ensure that water spray or mist does not drift.

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No garbage or non-exempt substances as defined by Resource Conservation and Recovery Act (RCRA) subtitle C will be placed in the reserve pit. All refuse (trash and other solid waste including cans, paper, cable, etc.) generated during construction, drilling, completion, and well testing activities will be contained in an enclosed receptacle, removed from the drill locations promptly, and transported to an approved disposal facility. Immediately after removal of the drilling rig, all debris and other waste materials not contained within trash receptacles will be collected and removed from the well location.

For the protection of livestock and wildlife, all open pits (excluding flare pits) will be fenced to prevent wildlife or livestock entry. Total height of pit fencing will be at least 42 inches and corner posts will be cemented and/or braced in such a manner as to keep the fence tight at all times. Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet. Siphons, catchments, and absorbent pads will be installed to keep hydrocarbons produced by the drilling rig or other equipment on location from entering the reserve pit. Hydrocarbons, contaminated pads, and/or soils will be disposed of in accordance with state and federal requirements.

Portable, self-contained chemical toilets and/or sewage processing facilities will be provided for human waste disposal. Upon completion of operations, or as required, the toilet holding tanks will be pumped and the contents disposed of in an approved sewage disposal facility. All applicable regulations pertaining to disposal of human and solid waste will be observed.

Materials Management

Hazardous materials above reportable quantities will not be produced by drilling or completing proposed wells or constructing the pipelines/facilities. The term "hazardous materials" as used here means: (1) any substance, pollutant, or containment listed as hazardous under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended 42 U.S.C. 9601 et seq., and the regulations issued under CERCLA; and (2) any hazardous waste as defined in RCRA of 1976, as amended. In addition, no extremely hazardous substance, as defined in 40 CFR 355, in threshold planning quantities, would be used, produced, stored, transported, or disposed of while producing any well.

Hazardous materials may be contained in some grease or lubricants, solvents, acids, paint, and herbicides, among others as defined above. Kerr-McGee maintains a file, per 29 CFR 1910.1200 (g) containing current Material Safety Data Sheets (MSDS) for all chemicals, compounds, and/or substances that are used during the course of construction, drilling, completion, and production operations for this project. The transport, use, storage and handling of hazardous materials will follow procedures specified by federal and state regulations. Transportation of hazardous materials to the well location is regulated by the Department of Transportation (DOT) under 49 CFR, Parts 171-180. DOT regulations pertain to the packing, container handling, labeling, vehicle placarding, and other safety aspects.

Potentially hazardous materials used in the development or operation of wells will be kept in limited quantities on well sites and at the production facilities for short periods of time. Chemicals meeting the criteria for being an acutely hazardous material/substance or meet the quantities criteria per BLM Instruction Memorandum No. 93-344 will not be used.

Chemicals subject to reporting under Title III of the Superfund Amendments and Reauthorization Act (SARA) in quantities of 10,000 pounds or more may be produced and/or stored at production facilities (crude oil/condensate, produced water). They may also be kept in limited quantities on drilling sites (barite, diesel fuel, cement, cottonseed hulls etc.) for short periods of time during drilling or completion activities.

Fluids disposal and pipeline/haul routes are depicted on Topo Map A.

Any produced water separated from recoverable condensate from the proposed well will be contained in a water tank and will then be transported by pipeline and/or truck to one of the pre-approved disposal sites:

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RNI in Sec. 5 T9S R22E NBU #159 in Sec. 35 T9S R21E Ace Oilfield in Sec. 2 T6S R20E MC&MC in Sec. 12 T6S R19E Pipeline Facility in Sec. 36 T9S R20E

Goat Pasture Evaporation Pond in SW/4 Sec. 16 T10S R22E

Bonanza Evaporation Pond in Sec. 2 T10S R23E

Or to one of the following Kerr-McGee active Salt Water Disposal (SWD) wells:

NBU 159 SWD in Sec. 35 T9S R21E CIGE 112D SWD in Sec. 19 T9S R21E CIGE 114 SWD in Sec. 34 T9S R21E NBU 921-34K SWD in Sec. 34 T9S R21E NBU 921-33F SWD in Sec. 34 T9S R21E

H. Ancillary Facilities:

No additional ancillary facilities are planned for this location.

I. Well Site Layout:

The location, orientation and aerial extent of each drill pad, reserve/completion/flare pit (for closed loop or non-closed loop operations), access road ingress/egress points, drilling rig, dikes/ditches, existing wells/infrastructure, proposed cuts and fills, and topsoil and spoil material stockpile locations are depicted on the exhibits for each project, where applicable. Site-specific conditions may require slight deviation in actual equipment depending on whether a closed loop system is used. Surface distance may be less if using closed loop. But in either case, the area of distrubance will not exceed the maximum disturbance outlined in the attached exhibits.

For the protection of livestock and wildlife, all open pits and cellars will be fenced to prevent wildlife or livestock entry. Total height of pit fencing will be at least 42 inches and corner posts will be cemented and/or braced in such a manner as to keep the fence tight at all times. Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet.

Each well will utilize either a centralized tank battery, centralized fluids management system, or have tanks installed on its pad. Production/ Produced Liquid tanks will be constructed, maintained, and operated to prevent unauthorized surface or subsurface discharges of liquids and to prevent livestock or wildlife entry. The tanks will be kept reasonably free from surface accumulations of liquid hydrocarbons. The tanks are not to be used for disposal of liquids from additional sources without prior approval of BLM.

J. Plans for Surface Reclamation:

The surface reclamation will be undertaken in two phases: interim and final. Interim reclamation is conducted following well completion and extends through the period of production. Interim reclamation is for the area of the well pad that is not required for production activities. Final reclamation is conducted following well plugging/conversion and/or facility abandonment processes.

Reclamation activities in both phases may include but is not limited to the re-contouring or re-configuration of topographic surfaces, restoration of drainage systems, segregation of spoils materials, minimizing surface disturbance, re-evaluating backfill requirements, pit closure, topsoil redistribution, soil treatments, seeding and weed control.

Interim Reclamation

Interim reclamation may include pit evaporation, fluid removal, pit solidification, re-contouring, ripping, spreading top soil, seeding, and/or weed control. Interim reclamation will be performed in accordance with OSO 1, or written notification

2/16/2012

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will be provided to the BLM for approval. Where feasible, drilling locations, reserve pits, or access routes not utilized for production operations will be re-contoured to a natural appearance.

Interim re-contouring involves bringing all construction material from cuts and fills back onto the well pad and site and reestablishing the natural contours where desirable and practical. Fill and stockpiled spoils no longer necessary to the operation will be spread on the cut slopes and covered with stockpiled topsoil. All stockpiled top soils will be used for interim reclamation where practical to maintain soil viability. Where possible, the land surface will be left "rough" after re-contouring to ensure that the maximum surface area will be available to support the reestablishment of vegetative cover.

A reserve pit, upon being allowed to dry, will be backfilled and compacted with cover materials that are void of any topsoil, vegetation, large stones, rocks or foreign objects. Soils that are moisture laden, saturated, or partially/completely frozen will not be used for backfill or cover. The pit area will be mounded to allow for settling and to promote positive surface drainage away from the pit. Disposal of pit fluids and linings is discussed in Section G.

Final Reclamation

Final reclamation will be performed for unproductive wells and after the end of the life of a productive well. As soon as practical after the conclusion of drilling and testing operations, unproductive drill holes will be plugged and abandoned (P&A). Site and road reclamation will commence following plugging. In no case will reclamation at non-producing locations be initiated later than six (6) months from the date a well is plugged. A joint inspection of the disturbed area to be reclaimed may be requested by Kerr-McGee. The primary purpose of this inspection will be to review the existing conditions, or agree upon a revised final reclamation and abandonment plan. The BLM will be notified prior to commencement of reclamation operations. A Notice of Intent to Abandon will be filed for final recommendations regarding surface reclamation.

After plugging, all wellhead equipment that is no longer needed will be removed, and the well site will be reclaimed. Final contouring will blend with and follow as closely as practical the natural terrain and contours of the original site and surrounding areas. After re-contouring the site to the approximate contour that existed prior to pad construction, final grading will be conducted over the entire surface of the well site and access road. The area will be ripped to a depth of 18 to 24 inches on 18 to 24-inch centers, where practical. The surface soil material will be pitted with small depressions to form longitudinal depressions 12 to 18 inches deep, where practical. The entire area will be uniformly covered with the depressions constructed perpendicular to the natural flow of water.

Reclamation of roads will be performed at the discretion of the BLM. All unnecessary surface equipment and structures (e.g. cattle guards) and water control structures (e.g. culverts, drainage pipes) not needed to facilitate successful reclamation will be removed during final reclamation. Roads that will be reclaimed will be ripped to a depth of 18 inches where practical, re-contoured to approximate the original contour of the ground and seeded in accordance with the seeding specifications of the BLM.

Upon successfully completing reclamation of a P&A location, a Final Abandonment Notice will be submitted to the BLM.

Measures Common to Interim and Final Reclamation

Soil preparation will be conducted using a disk for areas in need of more soil preparation following site preparation. This will provide primary soil tillage to a depth no greater than 6 inches. Prior to reseeding, compacted areas will be scarified by ripping or chiseling to loosen compacted soils, promote water infiltration, and improve soil aeration and root penetration.

Seeding will occur year-round as conditions allow and will typically be accomplished through the use of a no-till rangeland style seed drill with a "picker box" in order to seed "fluffy" seed. Where drill seeding is not the preferred method, seed will be broadcast and then raked into the ground at double the rate of drill seeding. Seed mixes appropriate to the native plant community as determined and specified for each project location based on the site specific soils will be used for re-vegetation. The seed mixes will be selected from a list provided by or approved by the BLM, or a specific seed mix will be proposed by Kerr-McGee to the BLM and used after its approval. The selected specific seed mix for each well location and road segment will be utilized while performing interim and final reclamation for each project. All seed will be certified and tags will be maintained by Kerr-McGee. Every effort will be made to obtain "cheat grass free seed".

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Seed Mix to be used for Well Site, Access Road, and Pipeline (as applicable):

Bonanza Area Mix	Pure Live Seed lbs/acre
Crested Wheat (Hycrest)	2
Bottlebrush Squirreltail	1
Western Wheatgrass	1
(Arriba)	
Indian Ricegrass	1
Fourwing Saltbush	2
Shadscale	2
Forage Kochia	0.25
Rocky Mountain Bee	0.5
Total	9.75

Additional soil amendments and/or stabilization may be required on sites with poor soils and/or excessive erosion potential. Where severe erosion can become a problem and/or the use of machinery is not practical, seed will be hand broadcast and raked with twice the specified amount of seed. Slopes will be stabilized using materials specifically designed to prevent erosion on steep slopes and hold seed in place so vegetation can become permanently established. These materials will include, but are not limited to: erosion control blankets, hydro-mulch, and/or bonded fiber matrix at a rate to achieve a minimum of 80 percent soil coverage. Soil amendments such as "Sustain" (an organic fertilizer that will be applied at the rate 1,800 - 2,100 lbs/acre with seed) may also be dry broadcast or applied with hydro-seeding equipment.

Weed Control

All weed management will be done in accordance with the Vernal BLM Surface Disturbance Weed Policy. Noxious weeds will be controlled, as applicable, on project areas. Monitoring and management of noxious and/or invasive weeds of concern will be completed annually until the project is deemed successfully reclaimed by the surface management agency and/or owner according to the Anadarko Integrated Weed Management Plan. Noxious weed infestations will be mapped using a GPS unit and submitted to the BLM with information required in the Vernal BLM Surface Disturbance Weed Policy. If herbicide is to be applied it will be done according to an approved Pesticide Use Permit (PUP), inclusive of applicable locations. All pesticide applications will be recorded using a Pesticide Application Record (PAR) and will be submitted along with a Pesticide Use Report (PUR) annually prior to Dec. 31.

Monitoring

Monitoring of reclaimed project areas will be completed annually during the growing season and actions to ensure reclamation success will be taken as needed. During the first two growing seasons an ocular methodology will be used to determine the success of the reclamation activities. During the 3rd growing season a 200 point line intercept (quantitative) methodology will be used to obtain basal cover. The goal is to have the reclaimed area reach 30% basal cover when compared to the reference site. If after three growing seasons the area has not reached 30% basal cover, additional reclamation activities may be necessary. Monitoring will continue until the reclaimed area reaches 75% basal cover of desirable vegetation when compared to the reference site. (Green River District Reclamation Guidelines)

All monitoring reports will be submitted electronically to the Vernal BLM in the form of a geo-database no later than March 1st of the calendar year following the data collection.

K. Surface/Mineral Ownership:

United States of America Bureau of Land Management 170 South 500 East Vernal, UT 84078 (435)781-4400

L. Other Information:

NBU 1022-301CS/ 1022-304BS/ 1022-304CS/ 1022-3P1CS/ 1022-3P4BS/ 1022-3P4CS Surface Use Plan of Operations 12 of 13

Onsite Specifics:

- NRS requested that the access road to the NBU 1022-3O pad be engineered
- Keep spoils out of drainage at corners 5 through 10.
- If not possible to place production facilities on NBU 1022-3J pad, use low profile tanks.
- Top Soil: Need to save 4" topsoil and will be move and put around the corner
- Need to obtain a storm water permit
- BMP on the pit use (waddles, hay bails or silt fence)

Cultural and Paleontological Resources

All personnel are strictly prohibited from collecting artifacts, any paleontological specimens or fossils, and from disturbing any significant cultural resources in the area. If artifacts, fossils, or any culturally sensitive materials are exposed or identified in the area of construction, all construction operations that would affect the newly discovered resource will cease, and Kerr-McGee will provide immediate notification to the BLM.

Resource Reports:

A Class I literature review was completed on February 1, 2012 by Montgomery Archaeological Consultants, Inc (MOAC). For additional details please refer to report MOAC 11-404.

A paleontological reconnaissance survey was completed on February 3, 2012 by Intermountain Paleo Consultants. For additional details please refer to report IPC 11-202PRE.

Biological field survey was completed on June 15, 2011 by Grasslands Consulting, Inc (GCI). For additional details please refer to report GCI-693.

Proposed Action Annual Emissions Tables:

Table 1: Proposed Action Annual Emissions (tons/year) ¹								
Pollutant	Development	Production	Total					
NOx	3.8	0.12	3.92					
CO	2.2	0.11	2.31					
VOC	0.1	4.9	5					
SO ₂	0.005	0.0043	0.0093					
PM_{10}	1.7	0.11	1.81					
PM _{2.5}	0.4	0.025	0.425					
Benzene	2.2E-03	0.044	0.046					
Toluene	1.6E-03	0.103	0.105					
Ethylbenzene	3.4E-04	0.005	0.005					
Xylene	1.1E-03	0.076	0.077					
n-Hexane	1.7E-04	0.145	0.145					
Formaldehyde	1.3E-02	8.64E-05	1.31E-02					

¹ Emissions include 1 producing well and associated operations traffic during the year in which the project is developed

Table 2:	Proposed Action versus 201 Inventory Com		I Emissions
	Proposed Action Production Emissions	WRAP Phase III 2012 Uintah Basin Emission	to WRAP Phase
Species	(ton/yr)	Inventory ^a (ton/yr)	III
NOx	23.52	16,547	0.14%
VOC	30	127.495	0.02%

a http://www.wrapair.org/forums/ogwg/PhaseIII_Inventory.html

Uintah Basin Data

NBU 1022-301CS/ 1022-304BS/ 1022-304CS/ 1022-3P1CS/ 1022-3P4BS/ 1022-3P4CS Surface Use Plan of Operations 13 of 13

M. Lessee's or Operators' Representative & Certification:

Gina T. Becker Regulatory Analyst II Kerr-McGee Oil & Gas Onshore LP PO Box 173779 Denver, CO 80217-3779 (720) 929-6086 Tommy Thompson General Manager, Drilling Kerr-McGee Oil & Gas Onshore LP PO Box 173779 Denver, CO 80217-3779 (720) 929-6724

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Bureau of Land Management Nationwide Bond WYB000291.

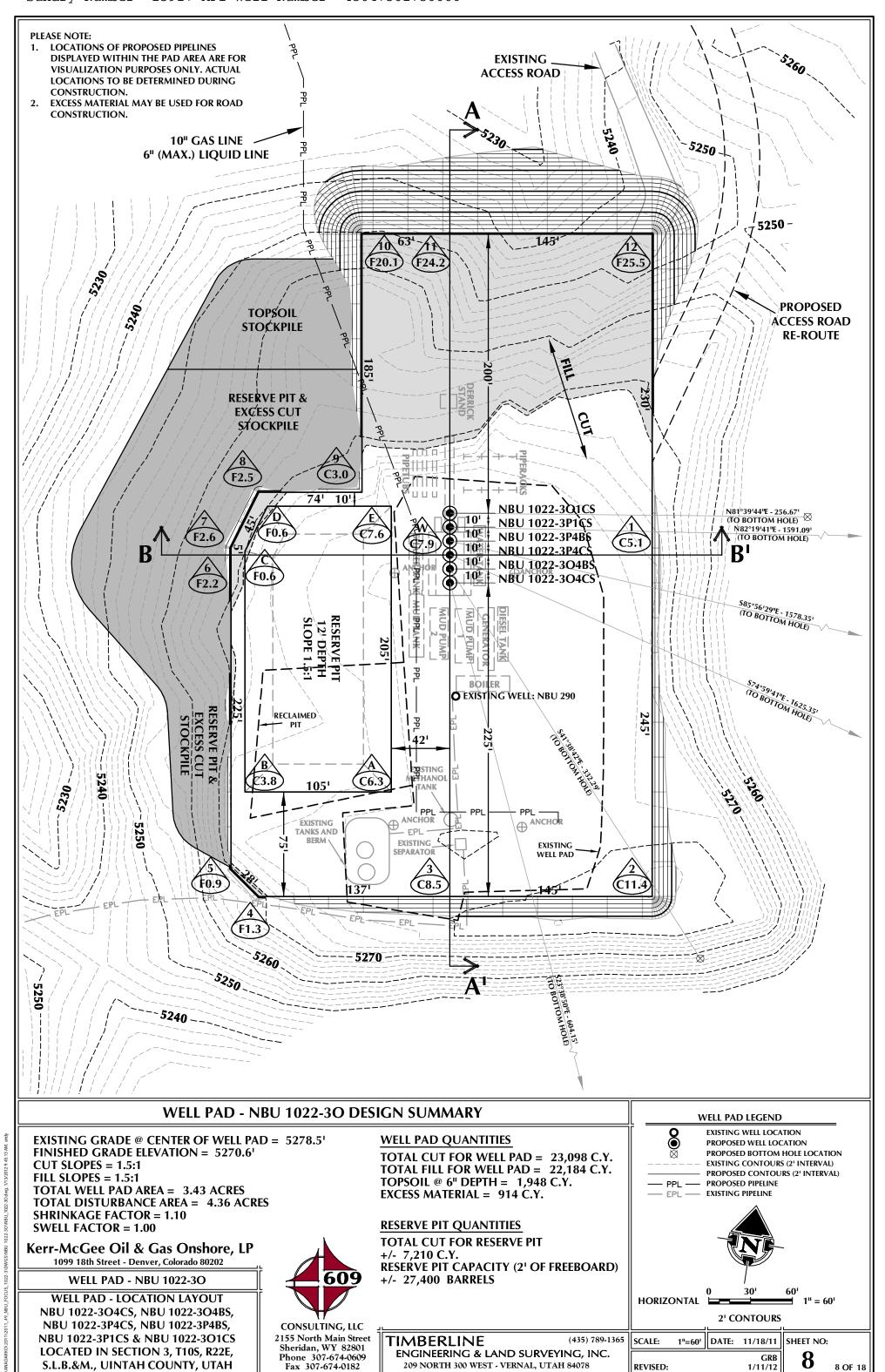
I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that I have full knowledge of the State and Federal laws applicable to this operation; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

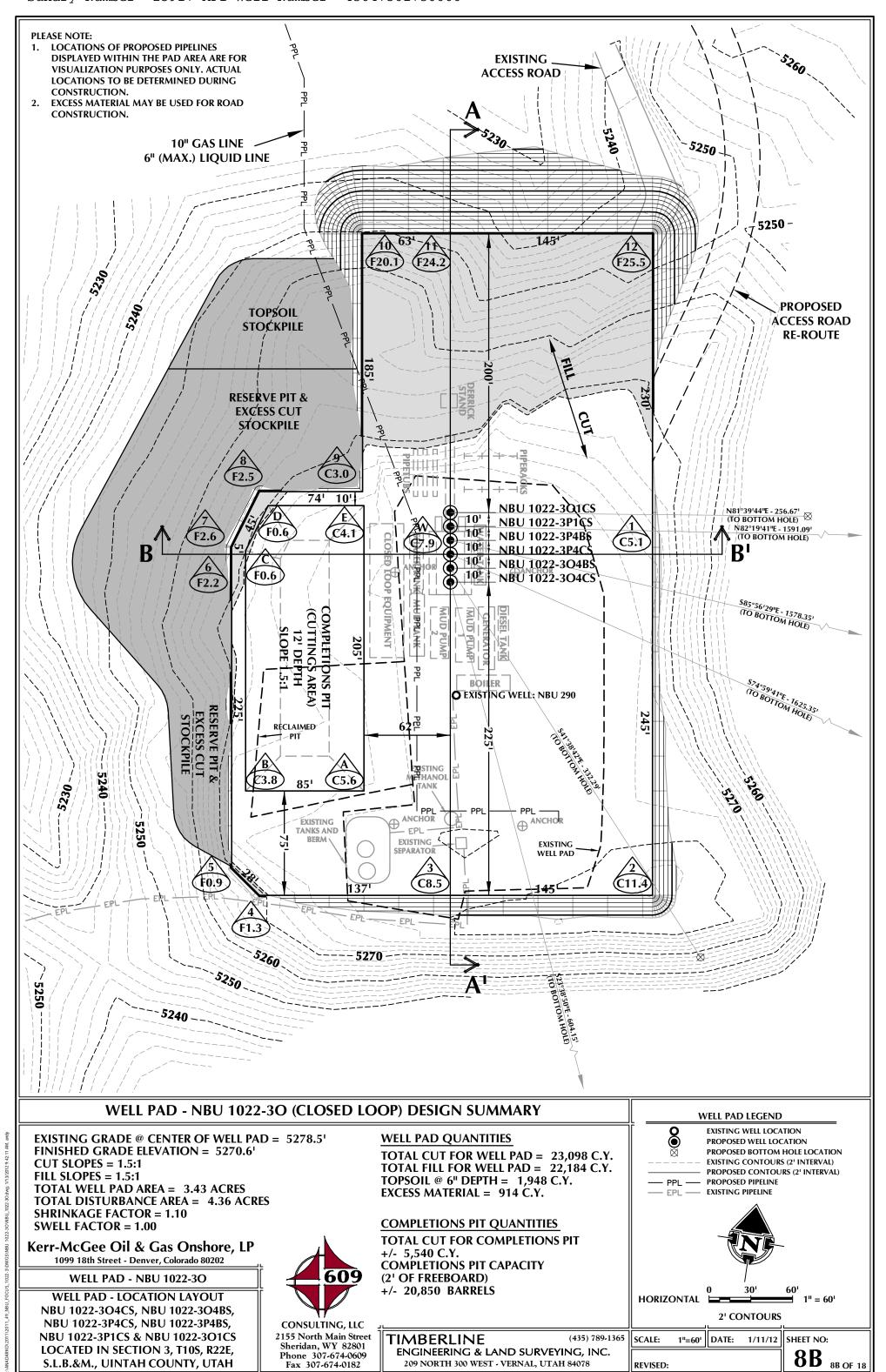
Gina T. Becker

February 16, 2012

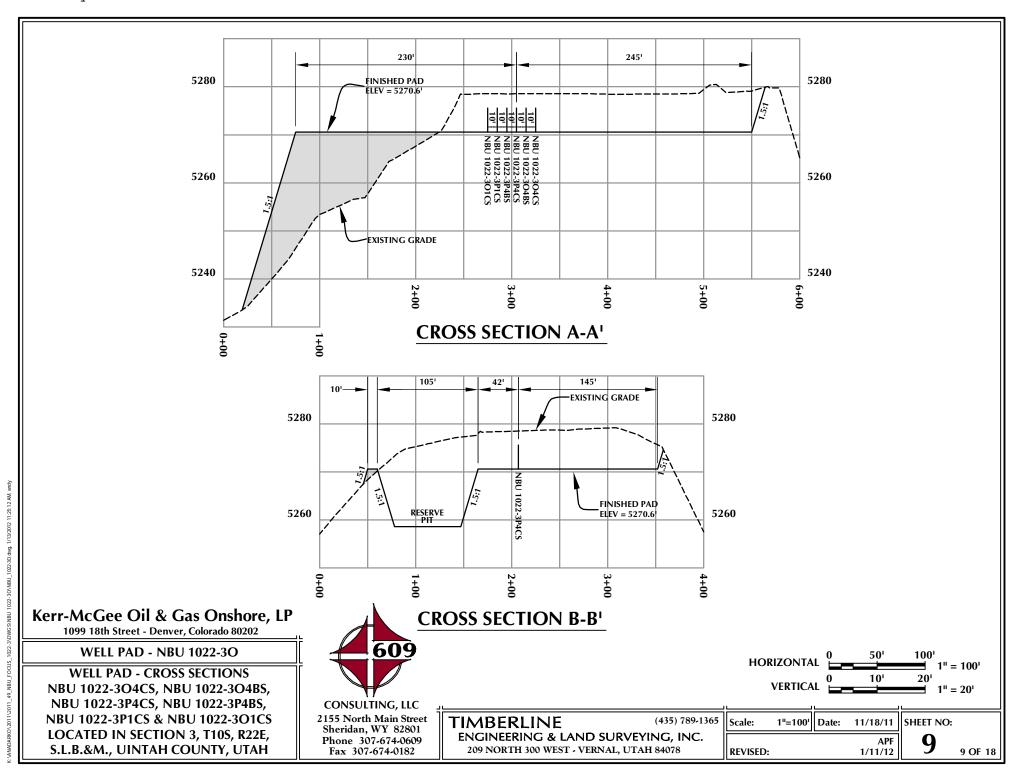
Date

			SURFACE P	OSITION					В	OTTOM HOLE		
WELL NAME		D83		NAD27				NAD	083	NAE		
NBU	LATITUDE 39°58'21.059"	109°25'26		UDE LON !1.183" 109°2	GITUDE	FOOTAC	_	TUDE 15.590"	LONGITUDE 109°25'23.406"	LATITUDE	LONGITUDE 109°25'20.950"	106' FSL
1022-3O4CS	39.972516°	109 23 26	2° 39.972	551° 109.4	23350°	2065' FE	- 1		109.423168°	39.971032°	109 23 20.930 109.422486°	1825' FEL
NBU 1022 204PS	39°58'21.156" 39.972543°	109°25'26		21.280" 109°2		670' FS	- 1	18.702" 862°	109°25'23.700"	39°58'18.826" 39.971896°	109°25'21.244"	421' FSL
1022-3O4BS NBU	39.9/2543° 39°58'21.254"	109.42403 109°25'26			23355° .5'24.098"	2067' FE 680' FS	_	17.089"	109.423250° 109°25'06.397"		109.422568° 109°25'03.942"	1847' FEL 256' FSL
1022-3P4CS	39.972570°	109.42404	3° 39.972	505° 109.4	23361°	2069¹ FE	L 39.971	414°	109.418444°	39.971448°	109.417762°	500' FEL
NBU 1022-3P4BS	39°58'21.352" 39.972598°	109°25'26 109.42404		1.03 =	.5'24.118" 23366°	689' FS 2070' FE	-	20.240" !289°	109°25'06.358" 109.418433°	39°58'20.364" 39.972323°	109°25'03.902" 109.417751°	575' FSL 496' FEL
NBU	39°58'21.449"	109°25'26	.594" 39°58'.	21.573" 109°2	5'24.138"	699' FS	_ 39°58'	23.540"	109°25'06.344"	39°58'23.664"	109°25'03.889"	909' FSL
1022-3P1CS NBU	39.972625° 39°58'21.546"	109.42405 109°25'26			23372° .5'24.158"	2072' FE 709' FS		3206° 21.913"	109.418429° 109°25'23.353"	39.973240° 39°58'22.037"	109.417747° 109°25'20.897"	494' FEL 746' FSL
1022-3O1CS	39.972652°	109 23 26			23377°	2073' FE	- 1		109.423154°	39.972788°	109.422471°	1819' FEL
NBU 290	39°58'20.271" 39.972298°	109°25'26			5'23.843"	580' FS						
	39.972290	109.42397	_	ATIVE COOR	23290°	2049' FE		n to Botto	om Hole			
WELL NAME	NORTH	EAST	WELL NAM		EAS		LL NAME	NOR"		WELL NAM	E NORTH	EAST
NBU	-553.4	242.31	NBU	-248 3	220.	81 NB	U	-420		NBU	-111 7'	1574.4'
1022-3O4CS WELL NAME	NORTH	EAST	1022-3O4B3		EAS	102	22-3P4CS			1022-3P4BS	5	
NBU	212.4	1576.8 ¹	NBU	37.2						1		
1022-3P1CS	212.4	15/6.8	1022-3O1C	37.2	254.	<u>. </u>				1		
Az. to Ex Az. to E	Xist. W.H.=166 Exist. W.H.=16 Exist. W.H.=1 D Exist. W.H.= TO Exist. W.H.= TO Exist. W.H	9.21417° 1 59.06722° (68.90278°	31.4' NBU 121.4' NBI • 111.4' NB • 101.4' NE 8° 91.4' NE 72° 81.4' NI	1022-30° J 1022-3P U 1022-3I U 1022-3 U 1022-3	O4BS O4CS	10'10' 10' 10' 10'		303*5	z=94.05861 6'29"E - 157. Bottom Ho	8.35' (1)		06° — — ►
Konn Mad		R. Car C)nch ava	I D		1		je)			7	
WEL	8th Street - De LPAD - N	NBU 10	rado 80202)22-30			609)	11	MBERL NGINEERIN			35) 789-1365 LINC.
1099 18 WELL	8th Street - De L PAD - N PAD INTE	NBU 10	122-30 122-30 100 PLAT			609)	11	NGINEERIN	INE IG & LAND 300 West - Ver	SURVEYING	i, INC.
WELL WELLS - NB	8th Street - De L PAD - N PAD INTE BU 1022-30	NBU 10 RFEREN 4CS, NBU	nado 80202 022-30 NCE PLAT U 1022-30		CONS			DATE	NGINEERIN 209 NORTH : SURVEYED:	IG & LAND 300 West - Ver	SURVEYINC NAL, UTAH 840	i, INC.
WELL WELLS - NB	8th Street - De L PAD - N PAD INTE BU 1022-30 1022-3P4CS	NBU 10 RFEREN 4CS, NBU , NBU 10	722-30 122-30 1022-30 1022-30 122-3P4BS,	4BS,	2155 No	ULTING, orth Main	LLC Street	DATE 10-16	NGINEERIN 209 NORTH : SURVEYED: 5-11	IG & LAND 300 West - Ver surveyed b	SURVEYINC NAL, UTAH 840 Y: J.W.	i, INC. 078
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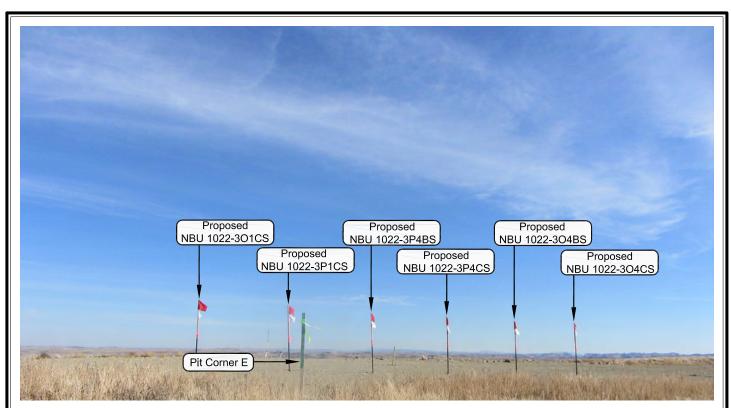


PHOTO VIEW: FROM PIT CORNER E TO LOCATION STAKE

CAMERA ANGLE: SOUTHEASTERLY



PHOTO VIEW: FROM EXISTING ACCESS ROAD

CAMERA ANGLE: SOUTHERLY

Kerr-McGee Oil & Gas Onshore, LP 1099 18th Street - Denver, Colorado 80202

WELL PAD - NBU 1022-30

LOCATION PHOTOS NBU 1022-3O4CS, NBU 1022-3O4BS, NBU 1022-3P4CS, NBU 1022-3P4BS, NBU 1022-3P1CS & NBU 1022-3O1CS LOCATED IN SECTION 3, T10S, R22E, S.L.B.&M., UINTAH COUNTY, UTAH.



CONSULTING, LLC 2155 North Main Street Sheridan WY 82801 Phone 307-674-0609 Fax 307-674-0182

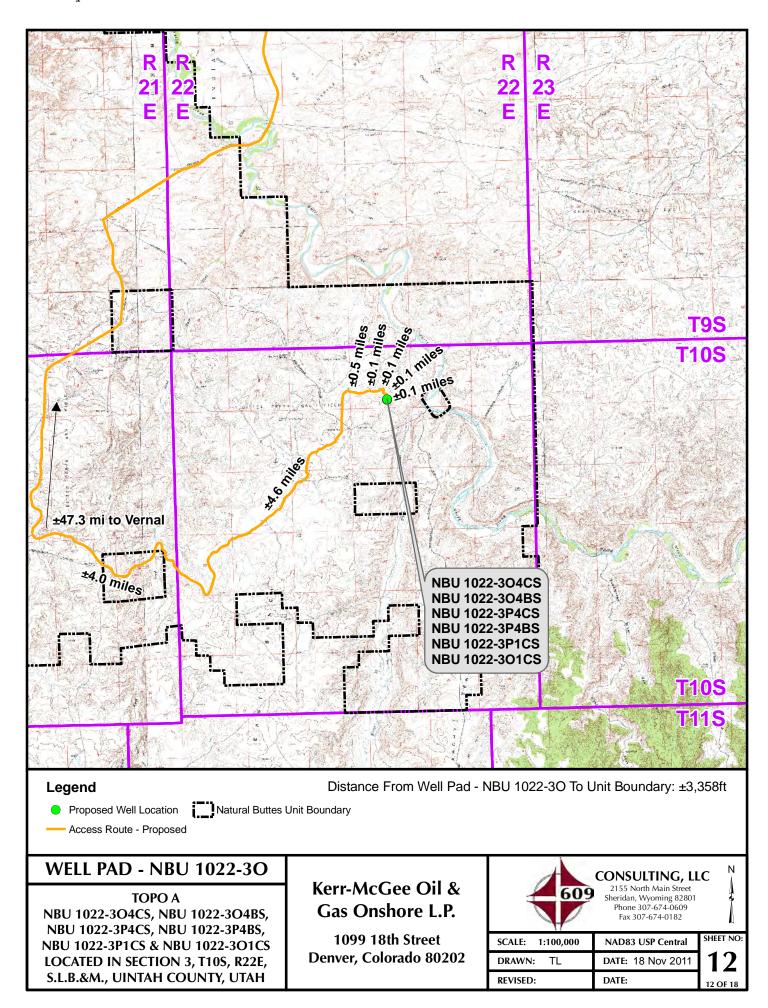
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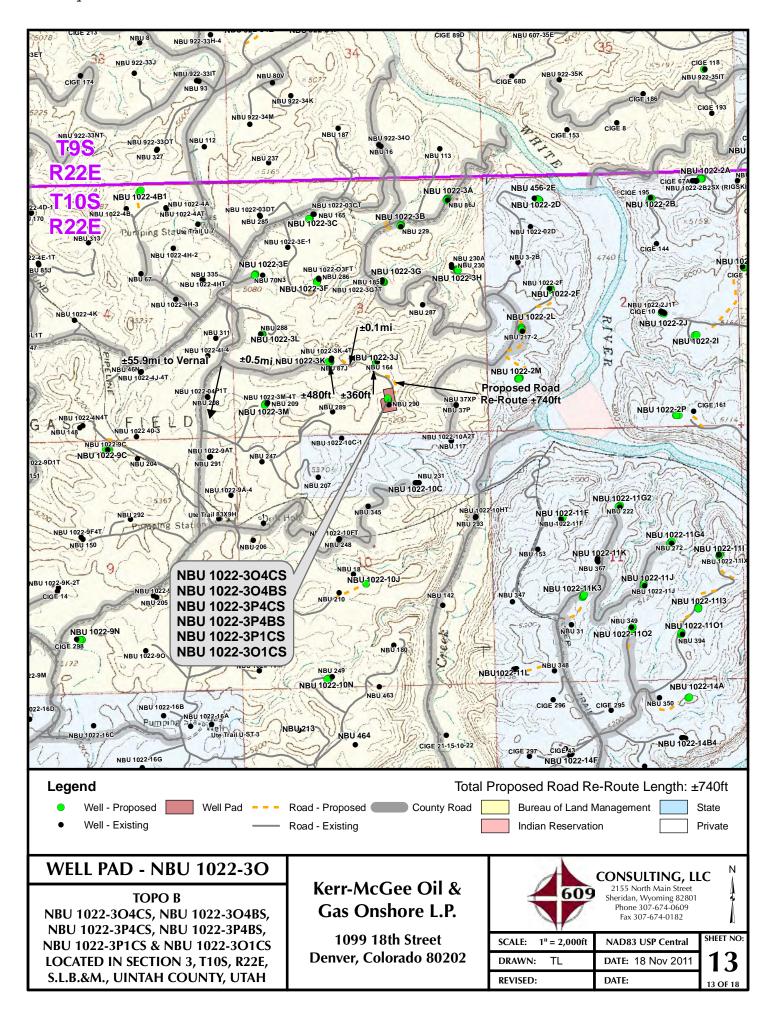
(435) 789-1365

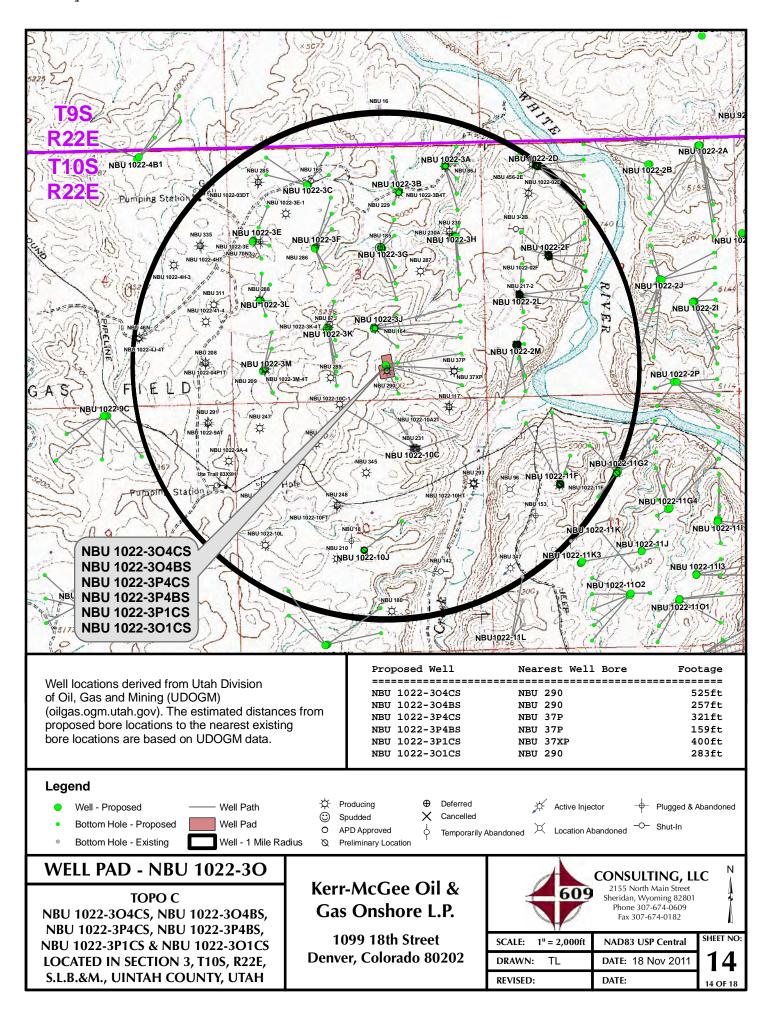
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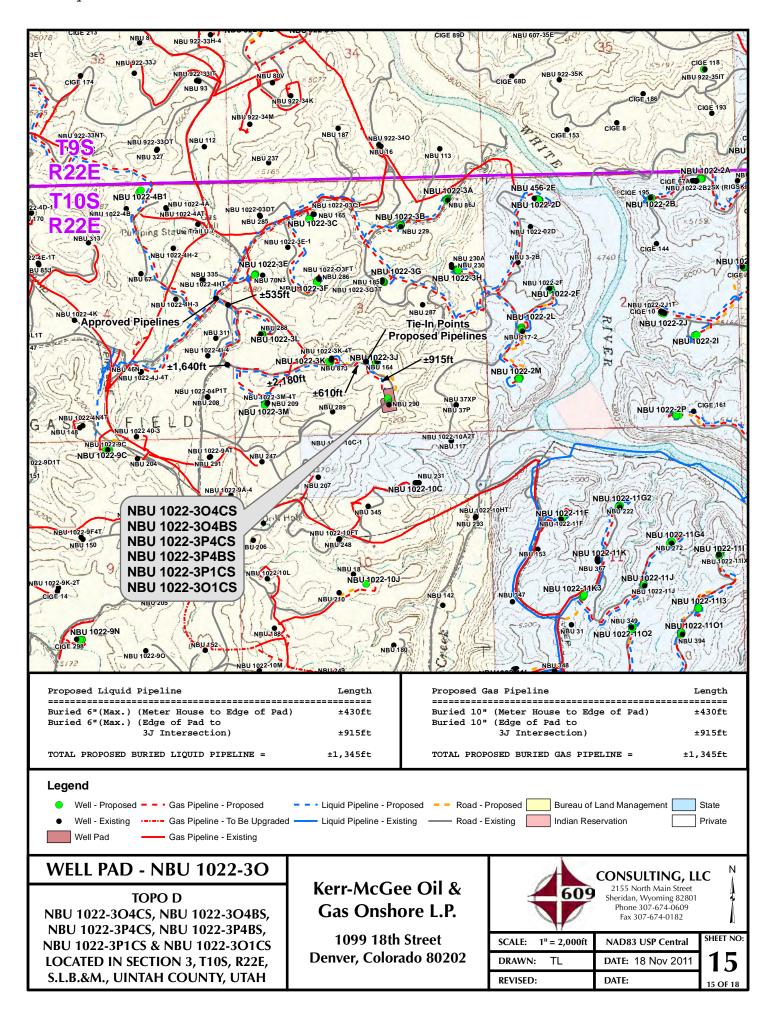
ENGINEERING & LAND SURVEYING, INC. 209 NORTH 300 WEST - VERNAL, UTAH 84078

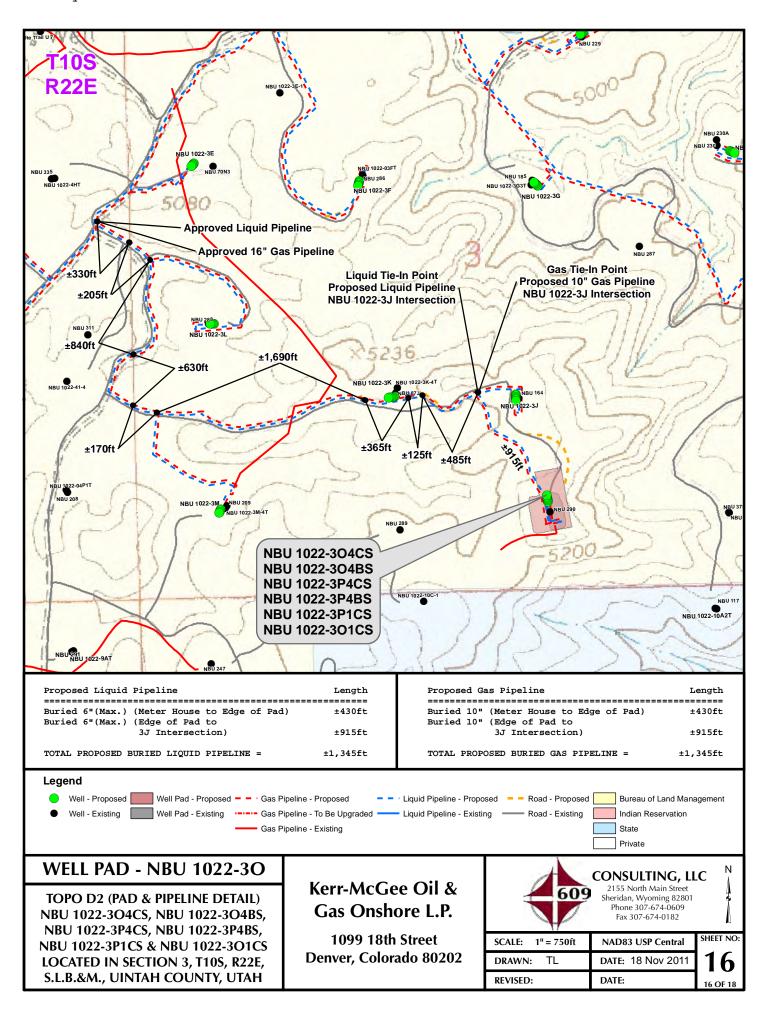
DATE PHOTOS TAKEN: 10-16-11	PHOTOS TAKEN BY: J.W.	SHEET NO:
DATE DRAWN: 11-14-11	DRAWN BY: T.J.R.	11
Date Last Revised:		11 OF 18

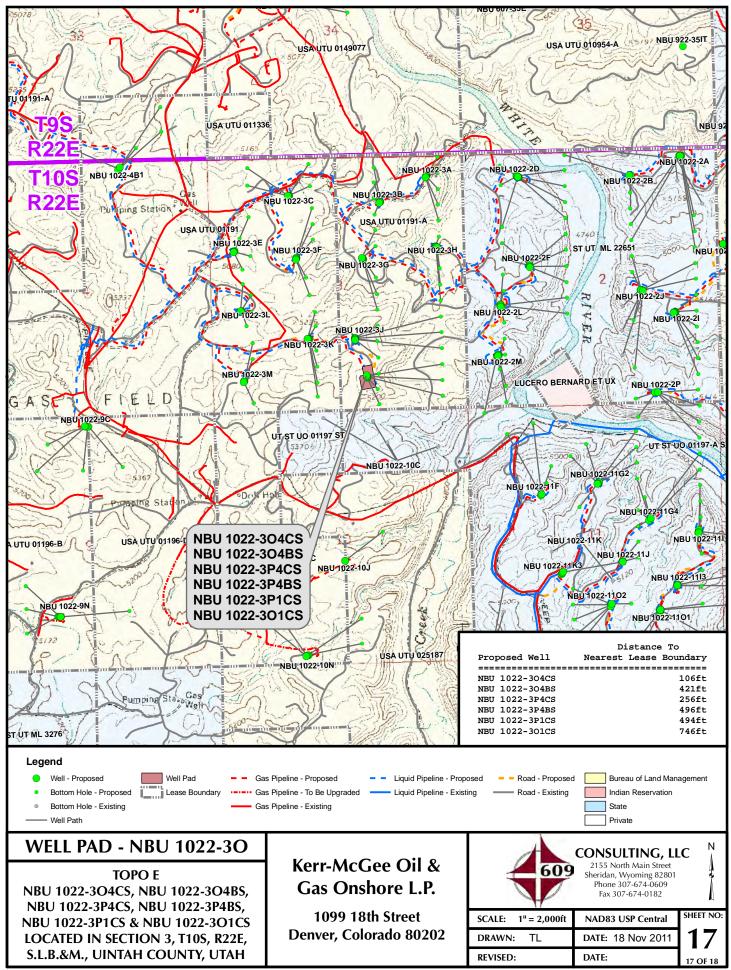














Kerr-McGee Oil & Gas Onshore LP 1099 18TH STREET STE. 1800 DENVER, CO 80202 720-929-6708 • FAX 720-929-7708 E-MAIL: JOE.JOHNSON@ANADARKO.COM

February 14, 2012

Ms. Diana Mason Division of Oil, Gas and Mining P.O. Box 145801 Salt Lake City, UT 84114-6100

Re: Directional Drilling R649-3-11

NBU 1022-3P4BS

T10S-R22E

Section 3: SWSE/SESE Surface: 689' FSL, 2070' FEL Bottom Hole: 575' FSL, 496' FEL

Uintah County, Utah

Dear Ms. Mason:

Pursuant to the filing of Kerr-McGee Oil & Gas Onshore LP's (Kerr-McGee) Application for Permit to Drill regarding the above referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to the Exception to Location and Siting of Wells.

- Kerr-McGee's NBU 1022-3P4BS is located within the Natural Buttes Unit area.
- Kerr-McGee is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Kerr-McGee will be able to utilize the existing road and pipelines in the area.
- Furthermore, Kerr-McGee certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

Therefore, based on the above stated information Kerr-McGee Oil & Gas Onshore LP requests the permit be granted pursuant to R649-3-11.

Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP

Joseph D. Johnson Landman

RECEIVED: May. 21, 2012

RECEIVED

AUG 0 8 2012

(August, 2007) SEP 1 9 2008

FEB 2 7 2012 **UNITED STATES**

DIV. OF OIL GAS BENNING OMB NO. 1004-0137 Expires: July 31, 2010

BLMVERNAL DEPARTMENT OF THE INTERIOR

5. Lease Serial No.

		BUREAU C	F LAND MA	NAG	EMENT	VETIME.			UTU-0119	
	APPI	ICATION FOR	PERMIT TO	DRI	LL OR	DEENTED .		6. If Indian	, Allottee or Trib	e Name
	AIII		TERMIT TO	DIG	DD OK.	KEENTEK.			N/A	
		[]		٦			·		r CA Agreement,	Name and No.
1a.	Type of Work:	X DRILL	<u> </u>	REEN	TER			UTU63		
11.	T £W-11.	Oil Well X Ga	s Well Other		70:1- 7-	[V]	7	8. Lease N	ame and Well No	
	Type of Well:		s wenOther		Single Zo	ne X Multiple 2	Lone		NBU 1022-3P	488
2.	Name of Operat					-		9. API We		
		KERR-MCGEE	OIL & GAS						430475017	3
3a.	Address					clude area code)		10. Field an	l Pool, or Explora	atory
	D ED 11 11	P.O. BOX 173779	2550	PHO		720-929-6086			NATURAL BU	TTES
		ER, COLORADO 80202		FA		720-929-7086		11 0 m T		
4.	At surface	(Report location clearly) ana in accoraanc	e wiin d	any State re	equirements.*)		11. Sec., 1.,F	K.,M.,or Bik.and	Survey or Ar
	At surface	SWSE 689 FSL	2070 FEL LA	T = 3	39.972598	LONG = -109.	424048			
	At proposed	SESE 575 FSL	40.6 EEI TA	Tr	0.072200	I 0010 100	410422	3	T 10S R	22E
	prod. Zone				39.972289	LONG = -109.	418433			
14.	Distance in mile	s and direction from the	-					12. County of	or Parish	13. State
		Approximately 5	7 miles Southeast	from Ve	rnal, Utah			UI	NTAH	UT
15.	Distance from p	roposed*			16. No. o	f acres in lease	17. Spa	cing Unit dec	licated to this we	11
	location to neare		496							
	property or lease					1363.21				
10		drlg. unit line, if any) roposed location*			10 Promo	and Douth	20 DI 2	M/DIA Daniel	No. on Gla	
10.		frilling, completed,	159		19. Propo 10326	MD	20. BL	M/ BIA Bond	No. on file	
	applied for, on the				10018	TVD	ŀ		WYB000291	
21.		w whether DF. RT, GR,	etc.)		22. Appro	ximate date work v	vill start*	23. Esti	mated duration	
	5278.5	GR				8/8/2012			60-90 DA	VS
	3270.0				24. Attach			·	00 30 137	.15
The	following comp	leted in accordance with	the requirements of	of Onsh	_		all be att	ached to this	form:	
1110	10110 //		ma requirements	or Olibri	010 011 484	Gus Graer 110. 1 31	ian oo an	uonoa to ans	101111.	
1.	Well plat certific	ed by a registered survey	or.		4.	Bond to cover the	operation	ns unless cove	ered by existing b	ond on file(see
2.	A Drilling Plan.					item 20 above).				•
		lan (if the location is on				-				
	SUPO shall be fi	led with the appropriate	Forest Service Off	ice).	6.	Such other site spe		ormation and	or plans as may	be required by the
	`					authorized officer.				
25.	Signature .	721		Name (Printed/ Ty	ped) GI	NA T BE	ECKER	Date Fel	bruary 16, 2012
\subseteq		J. Duk	<u> </u>							
Title	REGULATO	RY ANALYST II								
Ann	roved By (Signate	ure) -		Name (Printed/Ta	med) We am me			Data	
App	loved By (Biggail	Kenuba.		rvaine (.	17 mear 1	effy Kenca	zka		Date AUG 0	2 2012
Title	Assis	tanta eld Manager		Office						
		& Mineral Resources				VERNAL FIEL	D OFF	FICE		
Appli	cation approval de	oes not warrant or certify	that the applicant l	holds leg	gal or equita	able title to those rig	ghts in th	e subject leas	e which would en	title the applicant t
	act operations there		CONDITIO	n 2M	F ADDD!	OVAL ATTACH!	m pa			
Cond	itions of approval, :	if any, are attached.	AAMAHIM	189 6	e reinfill	JVAL ALIALIT				

Kerr-McGee Oil & Gas Onshore, L.P. hereby certifies that it is authorized by the proper lease interest owners and responsible u the terms and conditions of the lease to conduct lease operation associated with this application.

States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United



UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT VERNAL FIELD OFFICE**

VERNAL, UT 84078

(435) 781-4400



CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company: Well No:

Kerr-McGee Oil & Gas Onshore, LP

170 South 500 East

NBU 1022-3P4BS

API No: 43-047-50173

Location: Lease No: **SWSE Sec. 3. T10S. R22E**

Agreement:

UTU-01191A **Natural Buttes**

OFFICE NUMBER:

(435) 781-4400

OFFICE FAX NUMBER:

(435) 781-3420

A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.

NOTIFICATION REQUIREMENTS

Location Construction (Notify Environmental Scientist)	-	Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Environmental Scientist)	-	Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings to: blm_ut_vn_opreport@blm.gov
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)		Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

Page 2 of 7 Well: NBU 1022-3P4BS 7/20/2012

SURFACE USE PROGRAM CONDITIONS OF APPROVAL (COAs)

- All new and replacement internal combustion gas field engines of less than or equal to 300 designrated horse power must not emit more than 2 grams of NOx per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower-hour.
- All new and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 grams of NOx per horsepower-hour.
- The following will be used as standard operating procedures: Green completion or controlled VOC
 emissions methods with 90% efficiency for Oil or Gas Atmospheric Storage Tanks, VOC Venting
 controls or flaring, Glycol Dehydration and Amine Unites, Well Completion, Re-Completion, Venting,
 and Planned Blowdown Emissions.
- All reclamation activities will comply with the Green River Reclamation Guidelines
- All vehicles and equipment shall be cleaned either through power-washing, or other approved method, if the vehicles or equipment were previously operated outside the Uinta Basin, to prevent weed seed introduction.
- All disturbance areas shall be monitored for noxious weeds annually, for a minimum of three growing seasons following completion of project or until desirable vegetation is established
- Noxious and invasive weeds will be controlled by the proponent throughout the area of project disturbance.
- Noxious weeds will be inventoried and reported to BLM in the annual reclamation report. Where an
 integrated pest management program is applicable, coordination has been undertaken with the
 state and local management program (if existing). A copy of the pest management plan will be
 submitted for each project.
- A pesticide use proposal (PUP) will be obtained for the project, by the proponent if applicable.
- A permitted paleontologist is to be present to monitor construction at all well pads during all surface disturbing actives: examples include the following; building of the well pad, access road, and pipelines.

To maintain compliance with current cactus survey protocols, the following measures will be required

- 1. If construction does not occur within 4 years of the original survey date, new 100% clearance surveys will be required.
- 2. Prior to construction within 4 years of the original survey date, a spot check survey will be required during the year of construction. KMG and their respective 3rd party surveyor will refer to the current *Sclerocactus* Spot Check Survey Methods, to determine site specific survey distances and intensity levels.
- 3. Spot check reports will be reported to the BLM and the US Fish and Wildlife Service.
- 4. Construction will not commence until written approval is received from the BLM

Page 3 of 7 Well: NBU 1022-3P4BS 7/20/2012

Discovery Stipulation: Reinitiation of section 7 consultation with the USFWS will be sought immediately if any loss of plants or occupied habitat for Uinta Basin hookless cactus is anticipated as a result of project activities.

- Construction or drilling is not allowed from January 1 August 31 on the NBU 1022-30 pad to minimize impacts during golden eagle nesting.
- If it is anticipated that construction or drilling will occur during the given timing restriction, a BLM or
 qualified biologist shall be notified to conduct surveys for raptors. Depending upon the results of
 the surveys, permission to proceed may or may not be granted by the Authorized Officer.
- The best method to avoid entrainment is to pump from an off-channel location one that does not connect to the river during high spring flows. An infiltration gallery constructed in a BLM and Service approved location is best.
- If the pump head is located in the river channel where larval fish are known to occur, the following measures apply:
 - a. do not situate the pump in a low-flow or no-flow area as these habitats tend to concentrate larval fishes;
 - b. limit the amount of pumping, to the greatest extent possible, during that period of the year when larval fish may be present (April 1 to August 31); and
 - c. limit the amount of pumping, to the greatest extent possible, during the pre-dawn hours as larval drift studies indicate that this is a period of greatest daily activity.
- Screen all pump intakes with 3/32 inch mesh material.
- Approach velocities for intake structures will follow the National Marine Fisheries Service's document "Fish Screening Criteria for Anadromous Salmonids". For projects with an in-stream intake that operate in stream reaches where larval fish may be present, the approach velocity will not exceed 0.33 feet per second (ft/s).
- Report any fish impinged on the intake screen to the Service (801.975.3330) and the Utah Division of Wildlife Resources:

Northeastern Region 152 East 100 North, Vernal, UT 84078 Phone: (435) 781-9453

• Kerr McGee can only use the following water source: Permit # 49-2307 JD Field Services Green River-Section 15, T2N, R22E

Page 4 of 7 Well: NBU 1022-3P4BS 7/20/2012

DOWNHOLE PROGRAM CONDITIONS OF APPROVAL (COAs)

SITE SPECIFIC DOWNHOLE COAs:

- A copy of Kerr McGee's Standard Operating Practices (SOP version: dated 7/17/08 and approved 7/28/08 shall be on location.
- Surface casing cement shall be brought to surface.
- Production casing cement shall be brought 200' up and into surface casing.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily
 drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order
 No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a
 test pump with a chart recorder and <u>NOT</u> by the rig pumps. Test shall be reported in the driller's
 log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- Cement baskets shall not be run on surface casing.
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is
 encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal
 Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each

Page 5 of 7 Well: NBU 1022-3P4BS 7/20/2012

encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM,
 Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- Please submit an electronic copy of all other logs run on this well in LAS format to BLM_UT_VN_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

Page 6 of 7 Well: NBU 1022-3P4BS 7/20/2012

OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at <u>www.ONRR.gov</u>.
- Should the well be successfully completed for production, the BLM Vernal Field office must be
 notified when it is placed in a producing status. Such notification will be by written communication
 and must be received in this office by not later than the fifth business day following the date on
 which the well is placed on production. The notification shall provide, as a minimum, the following
 informational items:
 - Operator name, address, and telephone number.
 - Well name and number.
 - Well location (¼¼, Sec., Twn, Rng, and P.M.).
 - Date well was placed in a producing status (date of first production for which royalty will be paid).
 - o The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
 - o The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
 - Unit agreement and/or participating area name and number, if applicable.
 - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs,

Page 7 of 7 Well: NBU 1022-3P4BS 7/20/2012

core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover
 equipment shall be removed from a well to be placed in a suspended status without prior approval
 of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior
 approval of the BLM Vernal Field Office shall be obtained and notification given before resumption
 of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

Sundry Number: 33008 API Well Number: 43047501730000

	STATE OF UTAH		FORM 9	
	DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MINI		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-01191-A	
SUNDF	RY NOTICES AND REPORTS O	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
Do not use this form for procurrent bottom-hole depth, FOR PERMIT TO DRILL form	eepen existing wells below tal laterals. Use APPLICATION	7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES		
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 1022-3P4BS			
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	NSHORE, L.P.		9. API NUMBER: 43047501730000	
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18t	h Street, Suite 600, Denver, CO, 80217	PHONE NUMBER: 3779 720 929-	9. FIELD and POOL or WILDCAT: 65NATURAL BUTTES	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0689 FSL 2070 FEL			COUNTY: UINTAH	
QTR/QTR, SECTION, TOWNS	HIP, RANGE, MERIDIAN: 3 Township: 10.0S Range: 22.0E Meridia	n: S	STATE: UTAH	
11. CHEC	K APPROPRIATE BOXES TO INDICATI	E NATURE OF NOTICE, REPOR	RT, OR OTHER DATA	
TYPE OF SUBMISSION		TYPE OF ACTION		
Kerr-McGee Oil & G an extension to this	CHANGE TO PREVIOUS PLANS CHANGE WELL STATUS DEEPEN OPERATOR CHANGE PRODUCTION START OR RESUME REPERFORATE CURRENT FORMATION TUBING REPAIR WATER SHUTOFF WILDCAT WELL DETERMINATION COMPLETED OPERATIONS. Clearly show all cas Onshore, L.P. (Kerr-McGe APD for the maximum time as with any questions and/or co	e) respectfully requests Illowed. Please contact	Approved by the	
NAME (PLEASE PRINT)	PHONE NUMBE	R TITLE		
Luke Urban	720 929-6501	Regulatory Specialist		
SIGNATURE N/A		DATE 12/11/2012		

Sundry Number: 33008 API Well Number: 43047501730000



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047501730000

API: 43047501730000 Well Name: NBU 1022-3P4BS

Location: 0689 FSL 2070 FEL QTR SESE SEC 03 TWNP 100S RNG 220E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date Original Permit Issued: 12/23/2008

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

• If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes No
Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes No
 Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes No
• Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? Yes No
• Has the approved source of water for drilling changed? 🦲 Yes 🃵 No
 Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes No
• Is bonding still in place, which covers this proposed well? Yes No
nature: Luke Urban Date: 12/11/2012

Sig

Title: Regulatory Specialist Representing: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Sundry Number: 34007 API Well Number: 43047501730000

	STATE OF UTAH		FORM 9
ı	DEPARTMENT OF NATURAL RESOURC DIVISION OF OIL, GAS, AND MIN		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-01191-A
SUNDR	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:		
	posals to drill new wells, significantly reenter plugged wells, or to drill horizon for such proposals.		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 1022-3P4BS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.		9. API NUMBER: 43047501730000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th	n Street, Suite 600, Denver, CO, 80217	PHONE NUMBER: 73779 720 929-	9. FIELD and POOL or WILDCAT: 65NATERAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0689 FSL 2070 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSH	IIP, RANGE, MERIDIAN: 3 Township: 10.0S Range: 22.0E Meridi	an: S	STATE: UTAH
11. CHEC	APPROPRIATE BOXES TO INDICAT	E NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
1/21/2013	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION
Date of Work Completion:	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
SPUD REPORT Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL
DRILLING REPORT	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION
Report Date:		SI TA STATUS EXTENSION	
	WILDCAT WELL DETERMINATION	▼ OTHER	OTHER: Correction
The operator wish location. The plat	completed operations. Clearly show a nes to correct the Surface Question was attached to the sundry one 4, 2012. / From: SESE To:	uarter/Quarter for this that was approved on	Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY February 14, 2013
NAME (PLEASE PRINT) Gina Becker	PHONE NUMB 720 929-6086	ER TITLE Regulatory Analyst II	
SIGNATURE N/A		DATE 1/21/2013	

Sundry Number: 34763 API Well Number: 43047501730000

	STATE OF UTAH		FORM 9
	DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MINI		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-01191-A
SUNDR	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:		
	oposals to drill new wells, significantly de reenter plugged wells, or to drill horizont n for such proposals.		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 1022-3P4BS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	NSHORE, L.P.		9. API NUMBER: 43047501730000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18tl	In Street, Suite 600, Denver, CO, 80217	PHONE NUMBER: 3779 720 929-0	9. FIELD and POOL or WILDCAT: 65NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0689 FSL 2070 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSH	HIP, RANGE, MERIDIAN: 3 Township: 10.0S Range: 22.0E Meridian	n: S	STATE: UTAH
11. CHEC	K APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN [FRACTURE TREAT	☐ NEW CONSTRUCTION
	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
✓ SPUD REPORT	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
2/13/2013	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL
DRILLING REPORT	□ WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION
Report Date:			
		OTHER	OTHER:
MIRU TRIPLE A BU RAN 14" 36.7# SC	COMPLETED OPERATIONS. Clearly show all CKET RIG. DRILLED 20" CONDITION ON HEDULE 10 CONDUCTOR PIP X. SPUD WELL LOCATION ON 10:00 HRS.	OUCTOR HOLE TO 40'. E. CEMENT WITH 28	Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY February 15, 2013
NAME (PLEASE PRINT) Lindsey Frazier	PHONE NUMBE 720 929-6857	R TITLE Regulatory Analyst II	
SIGNATURE		DATE	
N/A		2/14/2013	

STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

ENTITY ACTION FORM

Operator:

KERR McGEE OIL & GAS ONSHORE LP

Operator Account Number: N 2995

Address:

P.O. Box 173779

city DENVER

state CO zip 80217

Phone Number: _(720) 929-6857

Well 1

API Number	Well	Name	QQ	Sec	Twp	Rng	County
4304750173	NBU 1022-3P4BS		SESSE	3	108	22E	UINTAH
Action Code	Current Entity Number	New Entity Number	s	pud Da	te		y Assignment fective Date
В	99999	2900	2	2/13/201	3	2/10	11 2013

Comments:

MIRU TRIPLE A BUCKET RIG.

SPUD WELL LOCATION ON February 13, 2013 AT 10:00 HRS.

Insmun -

Well 2

API Number	Well	Name	QQ	Sec	Twp	Rng	County
4304752932	NBU 1022-3P1CS		SWSE	3	108	22E	UINTAH
Action Code	Current Entity Number	New Entity Number	S	pud Da	te		ty Assignment ffective Date
B	99999	2900	2	2/13/201	3	21	1912012

Comments:

MIRU TRIPLE A BUCKET RIG.

SPUD WELL LOCATION ON February 13, 2013 AT 12:30 HRS.

WSMVD

Well 3

API Number	Well	Name	QQ	Sec	Twp	Rng	County
4304752940	NBU 1022-301CS		SWSE	3	108	22E	UINTAH
Action Code	Current Entity Number	New Entity Number	s	pud Da	te		tity Assignment Effective Date
B	99999	3900	2	2/13/201	3	21	1912013

Comments:

MIRU TRIPLE A BUCKET RIG.

SPUD WELL LOCATION ON February 13, 2013 AT 15:00 HRS.

WSMVD

ACTION CODES:

- A Establish new entity for new well (single well only)
- B Add new well to existing entity (group or unit well)
- C Re-assign well from one existing entity to another existing entity
- D Re-assign well from one existing entity to a nRECEIVED
- E Other (Explain in 'comments' section)

Lindsey Frazier

Name (Please Print)

Signature

REGULATORY ANALYST II

2/14/2013

Title

Date

FEB 1 9 2013

STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

ENTITY ACTION FORM

Operator:

KERR McGEE OIL & GAS ONSHORE LP

Operator Account Number: N 2995

Address:

P.O. Box 173779

city DENVER

state CO zip 80217

Phone Number: _(720) 929-6857

Well 1

API Number	Well	Name	QQ	Sec	Twp	Rng	County
4304750173	NBU 1022-3P4BS		SESSE	3	108	22E	UINTAH
Action Code	Current Entity Number	New Entity Number	s	pud Da	te		y Assignment fective Date
В	99999	2900	2	2/13/201	3	2/10	11 2013

Comments:

MIRU TRIPLE A BUCKET RIG.

SPUD WELL LOCATION ON February 13, 2013 AT 10:00 HRS.

Insmun -

Well 2

API Number	Well	Name	QQ	Sec	Twp	Rng	County
4304752932	NBU 1022-3P1CS		SWSE	3	108	22E	UINTAH
Action Code	Current Entity Number	New Entity Number	S	pud Da	te		ty Assignment ffective Date
B	99999	2900	2	2/13/201	3	21	1912012

Comments:

MIRU TRIPLE A BUCKET RIG.

SPUD WELL LOCATION ON February 13, 2013 AT 12:30 HRS.

WSMVD

Well 3

API Number	Well	Name	QQ	Sec	Twp	Rng	County
4304752940	NBU 1022-301CS		SWSE	3	108	22E	UINTAH
Action Code	Current Entity Number	New Entity Number	s	pud Da	te		tity Assignment Effective Date
B	99999	3900	2	2/13/201	3	21	1912013

Comments:

MIRU TRIPLE A BUCKET RIG.

SPUD WELL LOCATION ON February 13, 2013 AT 15:00 HRS.

WSMVD

ACTION CODES:

- A Establish new entity for new well (single well only)
- B Add new well to existing entity (group or unit well)
- C Re-assign well from one existing entity to another existing entity
- D Re-assign well from one existing entity to a nRECEIVED
- E Other (Explain in 'comments' section)

Lindsey Frazier

Name (Please Print)

Signature

REGULATORY ANALYST II

2/14/2013

Title

Date

FEB 1 9 2013

Sundry Number: 38666 API Well Number: 43047501730000

	STATE OF UTAH		FORM 9
1	DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MIN		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-01191-A
SUNDR	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:		
	oposals to drill new wells, significantly or reenter plugged wells, or to drill horizor n for such proposals.		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 1022-3P4BS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.		9. API NUMBER: 43047501730000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18tl	h Street, Suite 600, Denver, CO, 80217	PHONE NUMBER: 3779 720 929-	9. FIELD and POOL or WILDCAT: 5NIATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0689 FSL 2070 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: SWSE Section: 0	HIP, RANGE, MERIDIAN: 03 Township: 10.0S Range: 22.0E Meridi	an: S	STATE: UTAH
11. CHEC	K APPROPRIATE BOXES TO INDICAT	E NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION
	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
SPUD REPORT	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL
DRILLING REPORT Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION
6/5/2013	WILDCAT WELL DETERMINATION	OTHER	OTHER:
12 DESCRIBE PROPOSED OR	COMPLETED OPERATIONS. Clearly show a	U partinent details including dates	denths volumes etc
	Drilled to 9,115 ft. in May 20		Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY June 06, 2013
NAME (PLEASE PRINT) Teena Paulo	PHONE NUMBE 720 929-6236	R TITLE Staff Regulatory Specialist	
SIGNATURE	5 5 5 5 5 5 5	DATE	
N/A		6/5/2013	

Sundry Number: 39539 API Well Number: 43047501730000

	STATE OF UTAH			FORM 9
ı	DEPARTMENT OF NATURAL RESOU DIVISION OF OIL, GAS, AND M		6	5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-01191-A
SUNDR	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:			
	posals to drill new wells, significant reenter plugged wells, or to drill hori: n for such proposals.			7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well				8. WELL NAME and NUMBER: NBU 1022-3P4BS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.			9. API NUMBER: 43047501730000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th	n Street, Suite 600, Denver, CO, 802		NE NUMBER: 720 929-6	9. FIELD and POOL or WILDCAT: 5NATERAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0689 FSL 2070 FEL				COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: SWSE Section: 0	HP, RANGE, MERIDIAN: 3 Township: 10.0S Range: 22.0E Me	ridian: S	S	STATE: UTAH
11. CHECI	K APPROPRIATE BOXES TO INDIC	ATE N	ATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION			TYPE OF ACTION	
	ACIDIZE		ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS		CHANGE TUBING	CHANGE WELL NAME
SUBSEQUENT REPORT	CHANGE WELL STATUS		COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
Date of Work Completion:	DEEPEN	☐ F	FRACTURE TREAT	NEW CONSTRUCTION
	OPERATOR CHANGE	☐ F	PLUG AND ABANDON	PLUG BACK
SPUD REPORT	PRODUCTION START OR RESUME	F	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
Date of Spud:	REPERFORATE CURRENT FORMATION	☐ s	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
	TUBING REPAIR		/ENT OR FLARE	WATER DISPOSAL
✓ DRILLING REPORT Report Date:	WATER SHUTOFF		SI TA STATUS EXTENSION	APD EXTENSION
7/1/2013	WILDCAT WELL DETERMINATION		THER	OTHER:
40 DECCRIPE PROPOSED OR				landle values of
	COMPLETED OPERATIONS. Clearly sho			Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY July 01, 2013
NAME (PLEASE PRINT) Teena Paulo	PHONE NUM 720 929-6236	IBER	TITLE Staff Regulatory Specialist	
SIGNATURE N/A			DATE 7/1/2013	

RECEIVED: Jul. 01, 2013

Sundry Number: 40851 API Well Number: 43047501730000

	STATE OF UTAH		FORM 9
ı	DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MIN		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-01191-A
SUNDR	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:		
Do not use this form for procurrent bottom-hole depth, FOR PERMIT TO DRILL form	posals to drill new wells, significantly reenter plugged wells, or to drill horizo n for such proposals.	deepen existing wells below ntal laterals. Use APPLICATION	7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 1022-3P4BS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	NSHORE, L.P.		9. API NUMBER: 43047501730000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18tl	h Street, Suite 600, Denver, CO, 80217	PHONE NUMBER: 73779 720 929-6	9. FIELD and POOL or WILDCAT: 5M&TUTRAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0689 FSL 2070 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSH	HIP, RANGE, MERIDIAN: 03 Township: 10.0S Range: 22.0E Merid	lian: S	STATE: UTAH
11. CHEC	K APPROPRIATE BOXES TO INDICA	TE NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION
	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
SPUD REPORT	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL
DRILLING REPORT Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION
8/5/2013	WILDCAT WELL DETERMINATION	OTHER	OTHER:
12 DESCRIPE PROPOSED OR	COMPLETED OPERATIONS. Clearly show	all partinent details including dates.	<u> </u>
l .	d, finishing well completion r		Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY August 08, 2013
NAME (PLEASE PRINT) Teena Paulo	PHONE NUMB 720 929-6236	ER TITLE Staff Regulatory Specialist	
SIGNATURE N/A		DATE 8/5/2013	
/ 🗅		II 0/1/2/11/2	

Sundry Number: 40698 API Well Number: 43047501730000

	STATE OF UTAH		FORM 9
ı	DEPARTMENT OF NATURAL RESOURG DIVISION OF OIL, GAS, AND MII		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-01191-A
SUNDR	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:		
	posals to drill new wells, significantly reenter plugged wells, or to drill horizon for such proposals.		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 1022-3P4BS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.		9. API NUMBER: 43047501730000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th	n Street, Suite 600, Denver, CO, 8021	PHONE NUMBER: 7 3779 720 929-0	9. FIELD and POOL or WILDCAT: 5NATERAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0689 FSL 2070 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: SWSE Section: 0	HIP, RANGE, MERIDIAN: 03 Township: 10.0S Range: 22.0E Merio	dian: S	STATE: UTAH
11. CHECI	K APPROPRIATE BOXES TO INDICA	TE NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	New construction
	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
SPUD REPORT	✓ PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL
DRILLING REPORT Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION
7/30/2013	WILDCAT WELL DETERMINATION	OTHER	OTHER:
THE SUBJECT WEL	COMPLETED OPERATIONS. Clearly show L WAS PLACED ON PRODUC WELL HISTORY WILL BE SUBI COMPLETION REPORT.	CTION ON 7/30/2013. THE	Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY August 12, 2013
NAME (PLEASE PRINT) Teena Paulo	PHONE NUME 720 929-6236	BER TITLE Staff Regulatory Specialist	
SIGNATURE N/A		DATE 8/2/2013	

Form 3160-4 (August 2007)

UNITED STATES

FORM APPROVED OMB No. 1004-0137 Expires: July 31, 2010

DEPARTMENT OF THE INTERIOR	
BUREAU OF LAND MANAGEMENT	

	WELL (COMPL	ETION C	R RE	COM	IPLETI	ON R	EPOR	RT A	AND L	.OG				ase Serial I			
• 1	_					-		ПР	lng	Back	□ Diff	Res	svr	6. If	Indian, Alle	ottee o	or Tribe Name	
o. Type o.	. compieuon	_								Duvi		. 110.		7. Uı U	nit or CA A TU63047	greem A	nent Name and No.	
2. Name of KERR-	Operator MCGEE OIL	AND G	AS ONSHŒ	RMEail: T	eena.	Contact: T Paulo@a	EENA nadark	PAULC co.com)									
3. Address)17								area coo	le)		9. Al	PI Well No.		43-047-50173	
4. Location				d in acc	ordanc	e with Fed	leral re	quireme	nts)	ķ				10. F	rield and Po	ool, or	Exploratory	
At surfa	ice SWSE	689FSL	2070FEL 3	9.97259	98 N L	.at, 109.4	24048	W Lon					ŀ	11. S	ec., T., R.,	M., or	r Block and Survey	,
At top p	orod interval i	eported b	elow SES	E 574F	SL 48	4FEL							- }					.B
	1	SE 556F	SL 498FEL													ai 1511	UT	
14. Date Sp 02/13/2	oudded 2013					ed		\Box D	& A	\ Î⊠T	ed Ready to	Pro	od.	17. E				
18. Total D	epth:	MD TVD	9115 8832		19. P	lug Back	Γ.D.:					1	20. Dep	th Brid	ige Plug Se	et:	MD TVD	
21. Type E CBL/GI	lectric & Oth R/CCL/TEM	er Mecha P	nical Logs R	un (Subi	nit cop	y of each))				Wa	s DS	ST run?		🛛 No 🔝	□ Ye	s (Submit analysis))
23. Casing ar	nd Liner Reco	ord (Repo	ort all strings	set in w	ell)												,	
Hole Size	Size/G	rade	Wt. (#/ft.)			Bottom (MD)			ter			t	•		Cement 7	Гор*	Amount Pulled	1
	1		36.7		0		_		\dashv			-						
	1				_		_		\dashv			-						
1.013	4.50	JU P 110	11.0		20	909	+		\dashv		10	201				420	<u>' </u>	
							1		寸			寸						
24. Tubing	Record											_						
			acker Depth	(MD)	Size	Dep	th Set ((MD)	Pa	cker Dep	oth (MD)	+	Size	De	pth Set (MI	D)	Packer Depth (MI	<u>)</u>
		8451				26	. Perfo	ration R	ecor	·d								_
			Ton		Botte					-			Size	Т	Jo Holes		Perf Status	_
		АТСН	100	5806	Bott			remorat	cu I		O 6766			\neg		OPE		_
B)				7260		8948							0.36	60	140	OPE	N	
C)																		
D)																		
			ment Squeeze	e, Etc.														
			O 40 DUMP (4 E0E DI	01.0.01	ICK H2O	0 074 7	44 L DC 4					terial					
	58	06 10 8	948 FUNE	1,303 6	DLO OL	LICK HZO	X 21 1,1	44 LD3 .	30/3	UUTTAV	VA SAINL							
28. Product	ion - Interval	A	•															
	Test Date	Hours Tested	Test Production	Oil BBI			Water							Producti	on Method			
07/30/2013	08/05/2013	24		l		3360.0			J11. 71		Gia	vity			FLOV	VS FR	OM WELL	
	Tbg. Press.	Csg.	24 Hr.	Oil			Water				We	l Stat	us					
20/64	SI 2212	2507.0		28	I IVI	3360	вы 0		iiiO			PG	W					
At top prod interval reported below SESE 574FSL 484FEL At total depth SESE 556FSL 498FEL 11. Sec. 1, R. M., 70 FORE and 3 or Area Sec 3 T10S R22E K 12. County or Parish											_							
														Producti	on Method			
4. Location of Well (Report location clearly and in accordance with Federal requirements)* As strace SWSE 889FSL 2070FEL 39.972598 N Lat. 109.424048 W Lon																		
	Flwg.										We	ll Stat	us					
				i														

28b. Prod	luction - Interv	val C										
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravi	ty	Production Method		
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well	Status	ı		
28c. Prod	luction - Interv	/al D		<u> </u>			L					
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravi	ty	Production Method		
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well	Status	1		
29. Dispo	osition of Gas(Sold, usea	l for fuel, vent	ed, etc.)			1	I				
Show tests,	nary of Porous all important including dep ecoveries.	zones of p	orosity and c	ontents the	reof: Corec ne tool ope	d intervals an en, flowing an	d all drill-stem d shut-in pressures		31. For	rmation (Log) Ma	arkers	
	Formation		Top	Botton	ı	Descript	ions, Contents, etc.			Name		Top Meas. Depth
32. <u>A</u> ddit	ional remarks	(include p	plugging proc	edure):					BII MA W	REEN RIVER RD'S NEST AHOGANY ASATCH ESAVERDE		1254 1514 2047 4656 7029
surfac LTC operfo	First 210 ft. of ce hole was csg was run ration report e enclosed atta	drilled with from 505 & final such ments:	th an 11 in. t 1 ft. to 9097 urvey.	oit. DQX oft. Attach	sg was ru	ın from surfa	ace to 5051 ft.; il well history,	3	DST Pa	mort	4. Directio	unal Survay
	ndry Notice fo	_		•	1	6. Core A	-		DST Re Other:	ροιτ	4. Directio	mai Suivey
34. I here	by certify that	the foreg	Elect	ronic Subn	nission #2	18101 Verifi	orrect as determined ed by the BLM Well GAS ONSHORE, se	l Inforn	nation Sy	ystem.	ached instruction	ons):
Name	e(please print)	TEENA	PAULO				Title STA	AFF RE	GULATO	ORY SPECIALIS	ST	

Signature (Electronic Submission) Date 08/26/2013

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fradulent statements or representations as to any matter within its jurisdiction.

** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL **

				U	S ROC	KIES R	EGION	
				Opera	tion S	umma	ary Report	
Well: NBU 1022-	3P4BS GREEN						Spud Date: 4/2	1/2013
Project: UTAH-U	INTAH		Site: NBU	1022-03	O PAD			Rig Name No: PROPETRO 12/12, H&P 298/298
Event: DRILLING	3		Start Date	e: 4/3/201	3			End Date: 5/22/2013
Active Datum: RI Level)	KB @5,297.00usft (al	oove Mean Se	ea	UWI: S\	N/SE/0/1	0/S/22/E/:	3/0/0/26/PM/S/68	9/E/0/2070/0/0
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
4/21/2013	2:00 - 4:30	2.50	MIRU	01	В	Р		SKID RIG 20' TO NBU 1022-3P4BS, RIG UP SET MATTING BOARD, SET RIG IN PLACE, CATWALK, PIPE RACKS, PLACE BOTTOME HOLE ASSEMBLY
	4:30 - 5:00	0.50	MIRU	01	С	P		PRE SPUD JOB SAFETY MEETING REVEW DIRECTIONAL PLANS AND PLATS AND VERIFY LAT/LONGS AND WELL ORDER VERIFY DIRECTIONAL DRILLERS PLAN IS THE MOST RECENT AND APPROVED VERSION REFERENCE WELLBORE DIAGRAMS FOR EXACT CASING DESIGN AND GENERAL OVERVEW OF WELLBORE, PRIOR TO SPUD. FINISH PICKING UP BHA. PICK UP NOV 1.83 DEGREE BENT MOTOR (RUN #5)17 REV/GAL SN (775-77021). PICK UP 12.25 REED DRILL BIT RUN 2 SN (A172027)
	5:00 - 6:30	1.50	DRLSUR	02	В	Р	66	SPUD @ 04/21/2013 05:00. DRILL 12.25" HOLE 44'-210' (166', 110'/PER HOUR). 12.25" BIT ON 2ND RUN. WEIGHT ON BIT 5-15 K. STROKES PER MINUTE 120 GALLONS PER MINUTE 491. PRESSURE ON/OFF (BOTTOM) 800/600. ROTARY RPM 55, MOTOR RPM 83, TOTAL RPM 138. UP/DOWN/ ROTATE 20/20/20 K. DRAG 0 K. CIRCULATE CLOSED LOOP SYSTEM WITH 8.3# WATER. RUNNING VOLUME THROUGH 1 CENTRAFUGE DEWATERING AND, RUNNING VOLUME OVER BOTH SHAKERS. DRILL DOWN TO 210' WITH 6" DRILL COLLARS.
	6:30 - 8:30	2.00	DRLSUR	06	А	Р	232	PRE JOB SAFETY MEETING, CIRC 15 MINUTES AND, TRIP OUT TO CHANGE ASSEMBLY. LAY DOWN 6" DRILL COLLARS, BREAK 12 1/4" BIT. MAKE UP REED 11" BIT (2ND RUN) (SN 126867) PICK UP 8" DIRECTIONAL ASSEMBLY. INSTALL EM TOOL, TRIP IN HOLE.

API Well Number: 43047501730000 US ROCKIES REGION **Operation Summary Report** Well: NBU 1022-3P4BS GREEN Spud Date: 4/21/2013 Project: UTAH-UINTAH Site: NBU 1022-03O PAD Rig Name No: PROPETRO 12/12, H&P 298/298 **Event: DRILLING** End Date: 5/22/2013 Start Date: 4/3/2013 UWI: SW/SE/0/10/S/22/E/3/0/0/26/PM/S/689/E/0/2070/0/0 Active Datum: RKB @5,297.00usft (above Mean Sea Date P/U Time Duration Phase Code Sub MD From Operation Start-End (hr) Code (usft) 8:30 - 12:00 3.50 DRLSUR 02 Ρ 232 В DRILL 11". SURFACE HOLE 210'-600', (390', 111'/PER HOUR). WEIGHT ON BIT 18-25 K. STROKES PER MINUTE 120 GALLONS PER MINUTE PRESSURE ON/OFF(BOTTOM) 900/700. ROTARY RPM 55, MOTOR RPM 83, TOTAL RPM 138. UP/DOWN/ ROT 50/40/45 K. DRAG 5 K. SLIDING 15' PER 90'OF ROTATION GETTING 1.5 DEGREE BUILD RATES CURRENTLY 1' NORTH .3' RIGHT OF THE LINE CIRCULATE CLOSED LOOP SYSTEM WITH 8.4# RUNNING VOLUME THROUGH 1 CENTRAFUGE DEWATERING AND, RUNNING VOLUME OVER BOTH SHAKERS. NO HOLE ISSUES. 12:00 - 18:00 6.00 **DRLSUR** 02 622 DRILL 11". SURFACE HOLE 600'-1210', (610', 101'/PER HOUR). WEIGHT ON BIT 18-25 K. STROKES PER MINUTE 120 GALLONS PER MINUTE PRESSURE ON/OFF(BOTTOM) 1200/1000. ROTARY RPM 55, MOTOR RPM 83, TOTAL RPM 138. UP/DOWN/ ROT 60/40/50 K. DRAG 10 K. SLIDING 15' PER 90'OF ROTATION GETTING 1.5 DEGREE BUILD RATES CURRENTLY 1' NORTH 4' LEFT OF THE LINE CIRCULATE CLOSED LOOP SYSTEM WITH 8.4# RUNNING VOLUME THROUGH 1 CENTRAFUGE DEWATERING AND, RUNNING VOLUME OVER BOTH SHAKERS. NO HOLE ISSUES. 18:00 - 0:00 6.00 **DRLSUR** 02 1232 DRILL 11". SURFACE HOLE 1210'-1620', (410', 68'/PFR HOUR) WEIGHT ON BIT 18-25 K. STROKES PER MINUTE 120 GALLONS PER MINUTE PRESSURE ON/OFF(BOTTOM) 1400/1150. ROTARY RPM 55, MOTOR RPM 83, TOTAL RPM 138. UP/DOWN/ ROT 75/55/65 K. DRAG 10 K. SLIDING 15' PER 90'OF ROTATION GETTING 1.5 DEGREE BUILD RATES CURRENTLY 5' NORTH 6' LEFT OF THE LINE CIRCULATE CLOSED LOOP SYSTEM WITH 8.4# WATER RUNNING VOLUME THROUGH 1 CENTRAFUGE DEWATERING AND, RUNNING VOLUME OVER BOTH SHAKERS. PUT AIR ON THE HOLE @ 1800 CFM @ 1500'.

API Well Number: 43047501730000 US ROCKIES REGION **Operation Summary Report** Well: NBU 1022-3P4BS GREEN Spud Date: 4/21/2013 Project: UTAH-UINTAH Site: NBU 1022-03O PAD Rig Name No: PROPETRO 12/12, H&P 298/298 **Event: DRILLING** End Date: 5/22/2013 Start Date: 4/3/2013 UWI: SW/SE/0/10/S/22/E/3/0/0/26/PM/S/689/E/0/2070/0/0 Active Datum: RKB @5,297.00usft (above Mean Sea Date P/U Time Duration Phase Code MD From Operation Sub Start-End (hr) Code (usft) 4/22/2013 0:00 - 6:00 6.00 DRLSUR 02 Ρ 1642 В DRILL 11". SURFACE HOLE 1620'-2100', (480', 80'/PER HOUR). WEIGHT ON BIT 18-25 K. STROKES PER MINUTE 120 GALLONS PER MINUTE PRESSURE ON/OFF(BOTTOM) 1450/1200. ROTARY RPM 55, MOTOR RPM 83, TOTAL RPM 138. UP/DOWN/ ROT 80/60/70 K. DRAG 10 K. SLIDING 15' PER 90'OF ROTATION GETTING 1.5 DEGREE BUILD RATES CURRENTLY 14' NORTH 2' LEFT OF THE LINE CIRCULATE CLOSED LOOP SYSTEM WITH 8.4# RUNNING VOLUME THROUGH 1 CENTRAFUGE DEWATERING AND, RUNNING VOLUME OVER BOTH SHAKERS. PUT AIR ON THE HOLE @ 1800 CFM @ 1500'. 6.00 - 12:00 6.00 DRLSUR 02 2122 DRILL 11". SURFACE HOLE 2100'-2460', (360', 60'/PER HOUR). WEIGHT ON BIT 18-25 K. STROKES PER MINUTE 120 GALLONS PER MINUTE PRESSURE ON/OFF(BOTTOM) 1450/1250. ROTARY RPM 55, MOTOR RPM 83, TOTAL RPM 138. UP/DOWN/ ROT 85/65/75 K. DRAG 10 K. SLIDING 15' PER 90'OF ROTATION GETTING 1.5 DEGREE BUILD RATES CURRENTLY 4' NORTH 3' LEFT OF THE LINE CIRCULATE CLOSED LOOP SYSTEM WITH 8.4# WATER. RUNNING VOLUME THROUGH 1 CENTRAFUGE RUNNING VOLUME OVER DEWATERING AND, BOTH SHAKERS. PUT AIR ON THE HOLE @ 1800 CFM @ 1500'. 12:00 - 18:00 6.00 **DRLSUR** 02 2482 DRILL 11". SURFACE HOLE 2460'-2690, (230', 38'/PFR HOUR) WEIGHT ON BIT 18-25 K. STROKES PER MINUTE 120 GALLONS PER MINUTE PRESSURE ON/OFF(BOTTOM) 1450/1250. ROTARY RPM 55, MOTOR RPM 83, TOTAL RPM 138. UP/DOWN/ ROT 85/65/75 K. DRAG 10 K. SLIDING 15' PER 90'OF ROTATION GETTING 1.5 DEGREE BUILD RATES CURRENTLY 1' SOUTH 8' LEFT OF THE LINE CIRCULATE CLOSED LOOP SYSTEM WITH 8.4# WATER RUNNING VOLUME THROUGH 1 CENTRAFUGE DEWATERING AND, RUNNING VOLUME OVER BOTH SHAKERS. PUT AIR ON THE HOLE @ 1800 CFM @ 1500'. 18:00 - 20:00 2.00 **DRLSUR** CIRCULATE AND CONDITION HOLE. VOLUME IS CLEAN COMING OVER SHAKERS, 4-400 BBL UPRIGHT'S FULL AND 2-400 BBL UPRIGHTS EMPTY, MUD TANKS FULL.

API Well Number: 43047501730000 **US ROCKIES REGION Operation Summary Report** Well: NBU 1022-3P4BS GREEN Spud Date: 4/21/2013 Project: UTAH-UINTAH Site: NBU 1022-03O PAD Rig Name No: PROPETRO 12/12, H&P 298/298 **Event: DRILLING** End Date: 5/22/2013 Start Date: 4/3/2013 UWI: SW/SE/0/10/S/22/E/3/0/0/26/PM/S/689/E/0/2070/0/0 Active Datum: RKB @5,297.00usft (above Mean Sea P/U Date Time Duration Phase Code Sub MD From Operation Start-End (hr) Code (usft) 20:00 - 23:00 3.00 **CSGSUR** 06 Ρ D TRIP OUT OF HOLE. LAY DOWN DRILL STRING, BOTTOM HOLE ASSEMBLY. DIRECTIONAL TOOLS, MOTOR AND, BIT. CLEAR TOOL AREA. 23:00 - 0:00 1.00 **CSGSUR** 06 PRE JOB SAFETY MEETING, MOVE PIPE RACKS AND CATWALK. PULL DIVERTER HEAD. RIG UP TO RUN SURFACE CASING. CLEAR UNRELATED TOOLS. 0:00 - 2:00 Р 4/23/2013 2.00 **CSGSUR** 12 C RUN 60 JOINTS OF 8-5/8". 28# J-55 LTC CASING. RAN 1 CENTRALIZER ON FIRST THREE JOINTS, AND EVERY OTHER JOINT FOR 2 JOINTS FOR A TOTAL OF 5 CENTRALIZERS. RUN A TOTAL OF 60 JOINTS. RUN CASING TO BOTTOM WITH NO PROBLEMS. SET FLOAT SHOE @ 2664.22' KB. SET TOP OF BAFFLE PLATE @ 2618.10' KB. 2:00 - 4:00 2.00 **CSGSUR** 12 Ε PRE JOB SAFETY MEETING, RELEASE RIG @ 04/23/2013 04:00 RAN 200' OF 1". PIPE DOWN BACK-SIDE OF CASING. PRESSURE TEST LINES TO 2000 PSI. PUMP 145 BBLS OF WATER AHEAD. MIX AND PUMP 20 BBLS OF 8.5# GEL WATER MIX AND PUMP (300 sx) 61.4 BBLS OF 15.8.8# 1.15 YIELD. DROP PLUG ON FLY, DISPLACE WITH 163 BBLS OF H2O, NO RETURNS THROUGH OUT JOB, FINAL LIFT OF 360 PSI AT 3 BBL/MINUTE. BUMP THE PLUG WITH 680 PSI, HELD 680 PSI FOR 5 MINUTES, TESTED FLOAT AND FLOAT DID NOT SHUT DOWN AND WASH UP. 4.00 - 4:00 0.00 **CSGSUR** 12 Ε PUMP CEMENT DOWN ONE INCH PIPE WITH 150 sx (30.7 bbls.)SAME CEMENT NO CEMENT RETURNS TO SURFACE. SHUT DOWN AND WASH UP. WAIT 1.5 HOURS ON CEMENT, CEMENT DOWN BACKSIDE W/ 125 sx (25.8 bbls.) SAME CEMENT, NO RETURNS TO SURFACE. WAIT 1.5 HOURS ON CEMENT, CEMENT DOWN BACKSIDE W/ 100 sx (24.2 bbls.) SAME CEMENT, 3 BBLS CEMENT RETURNS TO SURFACE. RIG DOWN CEMENTERS. (CEMENT JOB FINISHED @ 04/23/2012 08:00) 5/17/2013 0:00 - 1:00 1.00 MIRU3 01 С 2712 SKID RIG TO NBU 1022-3P4BS, ALIGN OVER WELL, 1:00 - 1:30 PRPSPD Ρ 2712 0.50 Α NIPPLE UP BOP 14 1:30 - 2:00 0.50 **PRPSPD** Ε Ρ RIG DOWN CSG. BAILS AND ELEVATORS

API Well Number: 43047501730000 US ROCKIES REGION **Operation Summary Report** Well: NBU 1022-3P4BS GREEN Spud Date: 4/21/2013 Site: NBU 1022-03O PAD Project: UTAH-UINTAH Rig Name No: PROPETRO 12/12, H&P 298/298 **Event: DRILLING** End Date: 5/22/2013 Start Date: 4/3/2013 UWI: SW/SE/0/10/S/22/E/3/0/0/26/PM/S/689/E/0/2070/0/0 Active Datum: RKB @5,297.00usft (above Mean Sea Date P/U Time Duration Phase Code Sub MD From Operation Start-End (hr) Code (usft) 2:00 - 6:00 4.00 **PRPSPD** Ρ 2712 15 Α CT JSA TEST SURFACE CASING TO 1500 PSI @ 30 MINUTES - PRESSURE TEST PIPE RAMS, BLIND RAMS, IBOP, FLOOR VALVE, KILL LINES & KILL LINE VALVES, BOP WING VALVES, HCR VALVE + CHOKE LINE; INNER AND OUTER CHOKE VALVES & MANIFOLD TO 250 PSI LOW @ 5 MINUTES + 5000 PSI HIGH @ 10 MINUTES / TEST ANNULAR TO 250 PSI LOW @ 5 MINUTES + 2500 PSI HIGH @ 10 MINUTES / TEST SUPER CHOKE 6:00 - 6:30 0.50 **PRPSPD** 15 Α 2712 TEST SWACO EQUIP TO I,000 PS1 FOR 10 MIN 6:30 - 7:00 0.50 **PRPSPD** 14 В 2712 INSTALL WEAR BUSHING 7:00 - 9:00 2.00 **PRPSPD** Р 2712 06 Α PICK UP MUD MOTOR, BIT, DIRECTIONAL TOOLS, TIH TO 823', INSTALL ROT. RUBBER 9:00 - 9:30 0.50 **PRPSPD** 07 В Р 2712 LEVEL DERRICK, PRE SPUD INSPECTION 9:30 **PRPSPD** - 10:30 1.00 02 F TAG CMT @ 2,578' / DRILL FLOAT TRACK, BAFFLE @ 2,641' SHOE @ 2,686' NEW HOLE @ 2,712' 10:30 - 17:00 6.50 DRLPRC Р 2712 02 В DRILL /SLIDE / SURVEY/ F/ 2,712' TO 3,562' = 850' @ 130.8 FPH WOB 18,000-23,000 TOP DRIVE RPM 55-75 MUD MOTOR RPM 123 PUMPS 130 SPM= 585 GPM PUMP PRESSURE ON/OFF BTM 1830/1510 TORQUE ON/OFF BTM 8,000/7,000 PICK UP WT 110,000 SLACK OFF WT 80,000 **ROT WT 93,000** SLIDES 106' IN 10 MIN 12.4 % OF FOOTAGE DRILLED, 30.7%OF HRS DRILLED 0 BBLS FLUID LOSS PUMPING 5-10 BBL SWEEPS EVERY STAND,W/ 3-4% CAL CARB & ANCO FIBER MUD WT 8.8 VIS 30 **NOV-D WATER** SWACO OFF LINE 17:00 - 17:30 0.50 Р 3562 **DRLPRC** 07 Α RIG SERVICE @ 3,562' 17:30 - 0:00 6.50 DRLPRC 02 В Ρ 3562 DRILL /SLIDE / SURVEY/ F/ 3,562' TO 4,192' = 630 @ 96.9FPH WOB 18,000-23,000 **TOP DRIVE RPM 55-75** MUD MOTOR RPM 123 PUMPS 130 SPM= 585 GPM PUMP PRESSURE ON/OFF BTM 1.750/1.450 TORQUE ON/OFF BTM 8,000/4,000 PICK UP WT 117,000 SLACK OFF WT 95.000 ROT WT 106.000 SLIDES 198' IN 205 MIN 31.4 % OF FOOTAGE DRILLED, 52.5%OF HRS DRILLED 0 BBLS FLUID LOSS PUMPING 5-10 BBL SWEEPS EVERY STAND,W/ 3-4% CAL CARB & ANCO FIBER MUD WT 8 8 VIS 30 NOV-D WATER SWACO OFF LINE

API Well Number: 43047501730000 **US ROCKIES REGION Operation Summary Report** Well: NBU 1022-3P4BS GREEN Spud Date: 4/21/2013 Project: UTAH-UINTAH Site: NBU 1022-03O PAD Rig Name No: PROPETRO 12/12, H&P 298/298 **Event: DRILLING** End Date: 5/22/2013 Start Date: 4/3/2013 UWI: SW/SE/0/10/S/22/E/3/0/0/26/PM/S/689/E/0/2070/0/0 Active Datum: RKB @5,297.00usft (above Mean Sea Date P/U Time Duration Phase Code Sub MD From Operation Start-End (hr) Code (usft) 5/18/2013 0:00 - 6:30 6.50 DRLPRC 02 Ρ 4192 В DRILL /SLIDE / SURVEY/ F/ 4,192' TO 4,582' = 390 @ 60.9FPH WOB 18.000-23.000 TOP DRIVE RPM 55-75 MUD MOTOR RPM 123 PUMPS 130 SPM= 585 GPM PUMP PRESSURE ON/OFF BTM,1,520/1,330 TORQUE ON/OFF BTM 8,000/4,000 PICK UP WT 124,000 SLACK OFF WT 100,000 **ROT WT 112,000** SLIDES 73' IN 165 MIN 18.7 % OF FOOTAGE DRILLED, 42.3%OF HRS DRILLED **0 BBLS FLUID LOSS** PUMPING 5-10 BBL SWEEPS EVERY STAND,W/ 3-4% CAL CARB & ANCO FIBER MUD WT 8.8 VIS 30 **NOV-D WATER** SWACO OFF LINE 200 PSI PRESSURE LOSS 6:30 - 7:00 0.50 **DRLPRC** 05 С Ρ 4582 CIRC AND CHECK SURFACE EQUIPMENT FOR TRIP 7:00 - 10:00 Z 3.00 DRLPRC G 4582 06 TRIP FOR WASH OUT ON DIRECTIONAL EMITTER SUB AND TOOL CARRIER / LD TOOLS / MUD MOTOR AND BIT / PU NEW MUD MOTOR AND BIT / NO SPARE EMITTER SUB ON LOC 10:00 - 22:30 12.50 DRLPRC 21 D Ζ 4582 WAIT ON TOOLS 22:30 - 0:00 Z 4582 1.50 DRI PRC 06 G PICK UP DIRECTIONAL TOOLS, EMITTER SUB, INSTALL MWD TOOL, SURFACE TEST TOOLS, TIH, BREAK CIRC 2 CSG SHOE 5/19/2013 0:00 - 0:30 0.50 DRLPRC 06 G Ζ TRIP IN HOLE F/ 2,600-3,304' 0:30 - 2:30 Z W & R F/ 3,304' TO 4,582 2 00 DRI PRC 03 Α 2:30 - 6:00 3.50 **DRLPRC** 02 4582 DRILL /SLIDE / SURVEY/ F/ 4,582' TO 5,060' = 478 @136 FPH WOB 18,000-23,000 TOP DRIVE RPM 55-75 MUD MOTOR RPM 123 PUMPS 130 SPM= 585 GPM PUMP PRESSURE ON/OFF BTM,2 035/1,650 TORQUE ON/OFF BTM 9,000/6,000 PICK UP WT 130,000 SLACK OFF WT 109,000 ROT WT 117,000 SLIDES 24' IN 45 MIN 11.4 % OF FOOTAGE DRILLED, 21.4%OF HRS DRILLED 0 BBLS FLUID LOSS PUMPING 5-10 BBL SWEEPS EVERY STAND,W/ 3-4% CAL CARB & ANCO FIBER MUD WT 8.8 VIS 30 NOV-D WATER SWACO OFF LINE

API Well Number: 43047501730000 US ROCKIES REGION **Operation Summary Report** Spud Date: 4/21/2013 Well: NBU 1022-3P4BS GREEN Project: UTAH-UINTAH Site: NBU 1022-03O PAD Rig Name No: PROPETRO 12/12, H&P 298/298 **Event: DRILLING** End Date: 5/22/2013 Start Date: 4/3/2013 UWI: SW/SE/0/10/S/22/E/3/0/0/26/PM/S/689/E/0/2070/0/0 Active Datum: RKB @5,297.00usft (above Mean Sea Date P/U Time Duration Phase Code Sub MD From Operation Start-End (hr) Code (usft) 6:00 - 10:30 4.50 **DRLPRV** 02 В Ρ 5062 DRILL /SLIDE / SURVEY/ F/ 5,062' TO 5,617' = 555 @ 123 FPH WOB 18,000-23,000 TOP DRIVE RPM 55-75 MUD MOTOR RPM 123 PUMPS 130 SPM= 585 GPM PUMP PRESSURE ON/OFF BTM 2,100/1710 TORQUE ON/OFF BTM 10,000/9,000 PICK UP WT 126,000 SLACK OFF WT 109,000 **ROT WT 119,000** SLIDES 58' IN 110 MIN 10.25 % OF FOOTAGE DRILLED, 40.74%OF HRS DRL 0 BBLS FLUID LOSS PUMPING 5-10 BBL SWEEPS EVERY STAND,W/ 3-4% CAL CARB & ANCO FIBER MUD WT 8.8 VIS 30 **NOV-D WATER** SWACO OFF LINE 10:30 - 11:30 1.00 **DRLPRV** 07 5617 RIG SERVICE @ 5,617' 11:30 - 18:00 6.50 DRLPRV 02 В Ρ 5617 DRILL /SLIDE / SURVEY/ F/ 5,617' TO 6,235' = 618 @ WOB 18,000-23,000 TOP DRIVE RPM 55-75 MUD MOTOR RPM 123 PUMPS 130 SPM= 585 GPM PUMP PRESSURE ON/OFF BTM 2110/1725 TORQUE ON/OFF BTM 11,000/9,000 PICK UP WT 152,000 SLACK OFF WT 119,000 ROT WT 132,000 SLIDES 63' IN 120 MIN 10.1 % OF FOOTAGE DRILLED, 30.7%OF HRS DRILLED **0 BBLS FLUID LOSS** PUMPING 5-10 BBL SWEEPS EVERY STAND,W/ 3-4% CAL CARB & ANCO FIBER MUD WT 8.8 VIS 30 NOV-D WATER SWACO OFF LINE

API Well Number: 43047501730000 US ROCKIES REGION **Operation Summary Report** Well: NBU 1022-3P4BS GREEN Spud Date: 4/21/2013 Project: UTAH-UINTAH Site: NBU 1022-03O PAD Rig Name No: PROPETRO 12/12, H&P 298/298 **Event: DRILLING** End Date: 5/22/2013 Start Date: 4/3/2013 UWI: SW/SE/0/10/S/22/E/3/0/0/26/PM/S/689/E/0/2070/0/0 Active Datum: RKB @5,297.00usft (above Mean Sea Date P/U Time Duration Phase Code Sub MD From Operation Start-End (hr) Code (usft) 18:00 - 0:00 6.00 **DRLPRV** 6235 DRILL /SLIDE / SURVEY/ F/ 6,235' TO 6,705' = 470 @ 78.3 FPH WOB 18.000-23.000 TOP DRIVE RPM 55-75 MUD MOTOR RPM 123 PUMPS 130 SPM= 585 GPM PUMP PRESSURE ON/OFF BTM 2145/1840 TORQUE ON/OFF BTM 12,000/12,000 PICK UP WT 178,000 SLACK OFF WT 117,000 ROT WT 142,000 SLIDES 36' IN 95 MIN 7.6 % OF FOOTAGE DRILLED, 26.3%OF HRS DRILLED 0 BBLS FLUID LOSS PUMPING 5-10 BBL SWEEPS EVERY STAND,W/ 3-4% CAL CARB & ANCO FIBER MUD WT 8.8 VIS 30 **NOV-D WATER** SWACO OFF LINE 5/20/2013 0:00 - 6:00 6.00 **DRLPRV** 02 В 6705 DRILL /SLIDE / SURVEY/ F/ 6,705' TO 7,300' = 595 @ 99.1 FPH WOB 18,000-25,000 **TOP DRIVE RPM 55-75** MUD MOTOR RPM 123 PUMPS 130 SPM = 585 GPM PUMP PRESSURE ON/OFF BTM 2145/1840 TORQUE ON/OFF BTM 12,000/12,000 PICK UP WT 178,000 SLACK OFF WT 117,000 ROT WT 142,000 NO SLIDES 0 BBLS FLUID LOSS PUMPING 5-10 BBL SWEEPS EVERY STAND,W/ 3-4% CAL CARB & ANCO FIBER MUD WT 8.8 VIS 30 **NOV-D WATER** SWACO OFF LINE 6.00 - 13:00 7.00 **DRLPRV** 02 7300 DRILL /SLIDE / SURVEY/ F/ 7,300' TO 8,093 = 793 @113.2 FPH WOB 18,000-25,000 TOP DRIVE RPM 55-75 MUD MOTOR RPM 123 PUMPS 130 SPM = 585 GPM PUMP PRESSURE ON/OFF BTM 2,350/2,010 TORQUE ON/OFF BTM 12,000 / 9,000 PICK UP WT 192,000 SLACK OFF WT 140,000 **ROT WT 170,000 NO SLIDES** 0 BBLS FLUID LOSS PUMPING 5-10 BBL SWEEPS EVERY STAND,W/ 3-4% CAL CARB & ANCO FIBER MUD WT 8.8 VIS 30 **NOV-D WATER** SWACO OFF LINE 13:00 - 13:30 0.50 **DRLPRV** 07 Ρ 8093 DAILY RIG SERVICE

API Well Number: 43047501730000 US ROCKIES REGION **Operation Summary Report** Well: NBU 1022-3P4BS GREEN Spud Date: 4/21/2013 Project: UTAH-UINTAH Site: NBU 1022-03O PAD Rig Name No: PROPETRO 12/12, H&P 298/298 **Event: DRILLING** End Date: 5/22/2013 Start Date: 4/3/2013 UWI: SW/SE/0/10/S/22/E/3/0/0/26/PM/S/689/E/0/2070/0/0 Active Datum: RKB @5,297.00usft (above Mean Sea Date P/U Time Duration Phase Code Sub MD From Operation Start-End (hr) Code (usft) 13:30 - 18:00 4.50 **DRLPRV** 02 Ρ 8093 DRILL /SLIDE / SURVEY/ F/8,093' TO 8,471 = 378 В @84 FPH WOB 18,000-25,000 **TOP DRIVE RPM 55-75** MUD MOTOR RPM 110 PUMPS 130 SPM = 495 GPM PUMP PRESSURE ON/OFF BTM 1,20/1,650 TORQUE ON/OFF BTM 14,000 /12,000 PICK UP WT 205,000 SLACK OFF WT 146,000 **ROT WT 170,000** NO SLIDES 0 BBLS FLUID LOSS PUMPING 5-10 BBL SWEEPS EVERY STAND,W/ 3-4% CAL CARB & ANCO FIBER MUD WT 8.9 VIS 31 **NOV-D WATER** SWACO OFF LINE 18:00 - 0:00 6.00 DRLPRV 8471 DRILL /SLIDE / SURVEY/ F/8,471' TO 8,900 = 429 @71.5 FPH WOB 18,000-25,000 **TOP DRIVE RPM 55-75** MUD MOTOR RPM 104 PUMPS 110 SPM = 495 GPM PUMP PRESSURE ON/OFF BTM 2,825/2,520 TORQUE ON/OFF BTM 14,000 /12,000 PICK UP WT 207,000 SLACK OFF WT 140,000 **ROT WT 168,000** NO SLIDES 0 BBLS FLUID LOSS PUMPING 5-10 BBL SWEEPS EVERY STAND,W/ 3-4% CAL CARB & ANCO FIBER DISLPACE HOLE @ 8,600 10.4#/ 11.2# / 11.7 MUD WT 11.8 VIS 36 NOV OFF LINE SWACO ON LINE @ 8,600 - 25' FLARE ANN PRESS OFF LINE @ 8,700 5/21/2013 0:00 - 3:30 3.50 **DRLPRV** 02 В 8900 DRILL /SLIDE / SURVEY/ F/8,900' TO 9,115 = 215 @61.4 FPH WOB 18,000-25,000 TOP DRIVE RPM 55-75 MUD MOTOR RPM 104 PUMPS 110 SPM = 495 GPM PUMP PRESSURE ON/OFF BTM 2,825/2,520 TORQUE ON/OFF BTM 14,000 /12,000 PICK UP WT 207,000 SLACK OFF WT 140,000 **ROT WT 168,000** NO SLIDES 0 BBLS FLUID LOSS MUD WT 11.8 VIS 36 **NOV OFF LINE** SWACO 0FF LINE 3:30 - 4:30 1.00 **DRLPRV** С 9115 CIRC BTMS UP PRIOR TO WIPER TRIP

API Well Number: 43047501730000 US ROCKIES REGION **Operation Summary Report** Well: NBU 1022-3P4BS GREEN Spud Date: 4/21/2013 Project: UTAH-UINTAH Site: NBU 1022-03O PAD Rig Name No: PROPETRO 12/12, H&P 298/298 **Event: DRILLING** End Date: 5/22/2013 Start Date: 4/3/2013 UWI: SW/SE/0/10/S/22/E/3/0/0/26/PM/S/689/E/0/2070/0/0 Active Datum: RKB @5,297.00usft (above Mean Sea Date P/U Time Duration Phase Code Sub MD From Operation Start-End (hr) Code (usft) 4:30 - 5:30 **DRLPRV** Ρ 9115 10 STAND WIPER TRIP 1.00 06 Ε 5:30 - 7:00 1.50 С Р 9115 **DRLPRV** 05 CIRC AND COND HOLE FOR CASING 7:00 - 13:00 6.00 DRLPRV 06 D 9115 TOOH / BACK REAM 2 STANDS OFF BOTTOM / TRIP OUT T/8,100' PUMP DRY JOB / HOLE TOOK PROPER FLUID / FLOW CHECK @ CSG SHOE / PULL ROT RUBBER / BREAK BIT LD MUD MOTOR / FUNCTION TEST PIPE & BLIND RAMS 13:00 - 14:00 1.00 Р 9115 **CSGPRO** 14 B PULL WEAR BUSHING / X/O BAILS 14:00 - 14:30 0.50 **CSGPRO** 12 Α 9115 CTJSA RIG UP FRANKS CASING EQUIP 14:30 - 22:00 С Ρ 9115 7.50 **CSGPRO** 12 MAKE UP FLOAT EQUIP RUN 89 JOINTS P-110 11.6# LTC 4.5" CASING +1 X/O / 116 JOINTS ,P-110, 11.6#, DQX 4.5" CASING + RELATED TOOLS / BREAKING CIRCULATION @ SELECTED INTERVALS / LANDING CASING IN BOWL @ 9,097' FOR CIRC, & CEMENTING.SHOE @ 9,097', MV MARKER @ 6,922', X/O @ 5,171' 22:00 - 23:30 1.50 **CSGPRO** D 9115 CIRC CASING, R/D FRANKS CASING EQUIP, JSA W/ R.I 23:30 - 0:00 0.50 **CSGPRO** В Ρ 9115 12 INSTALL BJ CEMENT HEAD, TEST PUMP & LINES TO 5,000, 0:00 **CSGPRO** 5/22/2013 - 2:30 2.50 12 Ε Р INSTALL BJ CMT HEAD, TEST PUMP & LINES TO 5,180 PSI, DROP BOTTOM PLUG PUMP 25 BBLS FW, PUMP 520 SKS LEAD CEMENT @ 12.5 PPG, 183 BBL SLURRY (PREM LITE II + .0.25 pps CELLO FLAKE + 5 pps KOL SEAL +0.4 bwocFL52+ .05 lb/sx STATIC FREE + 8% bwoc BENTONITE + .2% bwoc SODIUM META SILICATE + 0.35 % R-3 + 101.8% FRESH WATER / (10.44 gal/sx,1.98 yield) + 1,100 SX TAIL @ 14.3 ppg 258 BBL SLURRY (CLS G 50/50 POZ + 10% SALT + .005llbs/sx STATIC FREE + .2% R3 +0.5%bwocEC-1+ .002 GPS FP-6L + 2% BENTONITE + 58.9% FW / (5.94 gal/sx, 1.32 yield) / DROP TOP PLUG & DISPLACE W/ 140.3 BBLS H2O + ADDITIVES / PLUG DOWN @ 02:04 HOURS / FLOATS HELD W/ 1.50 BBLS H2O RETURNED TO INVENTORY/ GOOD CIRC THROUGH OUT 5 BBLS LEAD CMT TO PIT / LIFT PRESSURE @ 2,750 PSI / BUMP PRESSURE TO 3,305 PSI / TOP OF TAIL CEMENT CALCULATED @ 4,158' / RIG DOWN CMT EQUIPMENT 2:30 - 3:00 FLUSH OUT BOP STACK & LINES 0.50 **CSGPRO** 12 B - 3:30 0.50 **CSGPRO** 12 Ε Р SET PACKOFF /LD LANDING JOINT 3:30 - 4:00 0.50 **CSGPRO** 12 Ρ CHANGE OUT CASING BAILS Α 4:00 Р - 5:00 1.00 **RDMO** 14 Α NIPPLE DOWN BOP/ PREP TO SKID, RELEASE RIG @

8/20/2013 11:05:53AM 10

05:00 HRS ON 5/22/2013 TO NBU 1022-301CS

General

Customer Information 7:

AUDIESS	Company Representative	US ROCKIES REGION
	Addiess	

Well/Wellbore Information 1.2

				API
			US ROCKIES REGION	We I
				11
General				Num
Customer Information				ber:
Company	US ROCKIES REGION			4
Representative				30
Address)4
Well/Wellbore Information	tion			7501'
Well	NBU 1022-3P4BS GREEN	Wellbore No.	Ю	73(
Well Name	NBU 1022-3P4BS	Wellbore Name	NBU 1022-3P4BS	00
Report No.	1	Report Date	7/15/2013	00
Project	LTAH-UINTAH	Site	NBU 1022-03O PAD)
Rig Name/No.		Event	COMPLETION	
Start Date	7/10/2013	End Date	7/30/2013	
Spud Date	4/21/2013	Active Datum	RKB @5,297.00usft (above Mean Sea Level)	
UWI	SWI/SE/0/10/S/22/E/3/0/0/26/PM/S/689/E/0/2070/0/C			

General ..

Contractor	Job Method	Supervisor	
Perforated Assembly	Conveyed Method		

Summary

1.5

Initial Conditions 1.4

Fluid Type		Fluid Density	Gross	iross Interval	5,806.0 (usft)-8,948.0 (usft start Date/Time	Start Date/Time	7/15/2013 12:00AM
Surface Press		Estimate Res Press	No. of	No. of Intervals	61	61 End Date/Time	7/15/2013 12:00AM
TVD Fluid Top		Fluid Head	Total	Fotal Shots	235	235 Net Perforation Interval	75.00 (usft)
Hydrostatic Press		Press Difference	Avg S	Avg Shot Density	3.13 (shot/ft)	3.13 (shot/ft) Final Surface Pressure	
Balance Cond	NEUTRAL					Final Press Date	

Intervals

Perforated Interval 2.1

August 20, 2013 at 11:08 am

Misrun	
Reason	23.00 PRODUCTIO N
Charge Weight (gram)	23.00
Phasing Charge Desc /Charge (°) Manufacturer	
Phasing (°)	120.00
Carr Size (in)	3.375
Carr Type /Stage No	EXP/
Diamete r (in)	0.360 EXP/
Misfires/ Add. Shot	
Shot Density (shot/ft)	3.00
MD Base (usft)	5.808.0
MDTop MD Base (usft)	5.806.0
L@ CCL-T N sft) S (usft)	
(nsft)	
Formation/ Reservoir	715/2013 WASATCH/ 2:00AM
Date	7/15/2013 N 12:00AM

OpenWells

OpenWells

Perforated Interval (Continued) 2.1

2.1 Pe	Perforated Interval (Continued)	Continu	(Pe										٦	US ROCKIES REGION	Mell I
Date	Formation/ Reservoir	(jsn)	S S	MD Top (usft)	MD Base (usft)	Shot Density	Misfires/ Add. Shot	Diamete r	Carr Type /Stage No	Carr Size	Phasing (*)	Charge Desc /Charge Manufacturer	Charge Weight	Reason	Number
7/15/2013 12:00AM	WASATCH/			5,928.0	5,930.0			<u> </u>	EXP/	3.375	90.00		23.00 F	23.00 PRODUCTIO	: 4
60	WASATCH/			6,015.0	6,018.0	3.00		0.360 E	EXP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	1304
7/15/2013 12:00AM	WASATCH/			6,096.0	6,098.0	3.00		0.360 E	EXP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	175
6	WASATCH/			6,154.0	6,156.0	3.00		0.360 E	EXP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	017
7/15/2013 12:00AM	WASATCH/			6,164.0	6,166.0	3.00		0.360 E	EXP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	300
7/15/2013 12:00AM	WASATCH/			6,234.0	6,236.0	3.00		0.360	EXP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	00
m	WASATCH/			6,274.0	6,275.0	3.00		0.360 E	EXP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	
m	WASATCH/			6,292.0	6,293.0	3.00		0.360 E	EXP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	
m	WASATCH/			6,306.0	6,307.0	3.00		0.360 E	EXP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	
m	WASATCH/			6,318.0	6,319.0	3.00		0.360 E	EXP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	
7/15/2013 12:00AM	WASATCH/			6,342.0	6,343.0	3.00		0.360 E	EXP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	
m	WASATCH/			6,359.0	6,360.0	3.00		0.360 E	EXP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	
7/15/2013 12:00AM	WASATCH/			5,511.0	6,513.0	3.00		0.360 E	EXP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	
7/15/2013 12:00AM	WASATCH/			6,601.0	6,602.0	3.00		0.360 E	EXP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	
7/15/2013 12:00AM	WASATCH/			6,624.0	6,625.0	3.00		0.360 E	EXP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	
7/15/2013 12:00AM	WASATCH/			6,657.0	6,658.0	3.00		0.360 EXP/	EXP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	
7/15/2013 12:00AM	WASATCH/			6,676.0	6,677.0	3.00		0.360 E	EXP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	
7/15/2013 12:00AM	WASATCH/			0.969,9	6,697.0	3.00		0.360 E	EXP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	
	WASATCH/			6,707.0	6,708.0	3.00		0.360 E	EXP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	
	WASATCH/			6,727.0	6,728.0	3.00		0.360 EXP/	EXP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	
7/15/2013 12:00AM	WASATCH/			6,765.0	6,766.0	3.00		0.360 EXP/	EXP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	

Perforated Interval (Continued)

													٦	US ROCKIES REGION	
2.1 Pe	Perforated Interval (Continued)	(Continu	(pa												. Nu
Date	Formation/ Reservoir	(JJSN)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density A	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	mber unisim
7/15/2013 12:00AM	MESAVERDE/			7,260.0	7,263.0			0.360 E	EXP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	: 4
7/15/2013 12:00AM	MESAVERDE/			7,292.0	7,294.0	3.00		0.360 E	EXP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	304
7/15/2013 12:00AM	MESAVERDE/			7,336.0	7,338.0	4.00		0.360 E	EXP/	3.375	90.00		23.00 F	23.00 PRODUCTIO N	175
7/15/2013 12:00AM	MESAVERDE/			7,532.0	7,533.0	3.00		0.360 E	EXP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	017
7/15/2013 12:00AM	MESAVERDE/			7,566.0	7,567.0	3.00		0.360 E	EXP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	300
7/15/2013 12:00AM	MESAVERDE/			7,590.0	7,591.0	3.00		0.360 E	EXP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	00
7/15/2013 12:00AM	MESAVERDE/			7,636.0	7,637.0	3.00		0.360 E	EXP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	
7/15/2013 12:00AM	MESAVERDE/			7,650.0	7,651.0	3.00		0.360 EXP/	:XP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	
7/15/2013 12:00AM	MESAVERDE/			7,690.0	7,691.0	3.00		0.360 E	EXP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	
7/15/2013 12:00AM	MESAVERDE/			7,748.0	7,750.0	3.00		0.360 EXP/	:XP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	
7/15/2013 12:00AM	MESAVERDE/			7,936.0	7,937.0	3.00		0.360 E	EXP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	
7/15/2013 12:00AM	MESAVERDE/			7,963.0	7,964.0	3.00		0.360 EXP/	:XP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	
7/15/2013 12:00AM	MESAVERDE/			7,974.0	7,975.0	3.00		0.360 E	EXP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	
7/15/2013 12:00AM	MESAVERDE/			0.666,7	8,000.0	3.00		0.360 E	EXP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	
7/15/2013 12:00AM	MESAVERDE/			8,094.0	8,095.0	3.00		0.360 E	EXP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	
7/15/2013 12:00AM	MESAVERDE/			8,108.0	8,109.0	3.00		0.360 E	EXP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	
7/15/2013 12:00AM	MESAVERDE/			8,126.0	8,127.0	3.00		0.360 E	EXP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	
7/15/2013 12:00AM	MESAVERDE/			8,150.0	8,151.0	3.00		0.360 E	EXP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	
7/15/2013 12:00AM	MESAVERDE/			8,196.0	8,197.0	3.00		0.360 E	EXP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	
7/15/2013 12:00AM	MESAVERDE/			8,212.0	8,213.0	3.00		0.360 EXP/	:XP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	
7/15/2013 12:00AM	MESAVERDE/			8,262.0	8,263.0	3.00		0.360 EXP/	:XP/	3.375	120.00		23.00 F	23.00 PRODUCTIO N	

Perforated Interval (Continued)

API Well	. Nu	mber	: 4	304	1750	017	300	00												
REGION		Misrun																		
US ROCKIES REGION		Reason	23.00 PRODUCTIO N																	
		Charge Weight (gram)	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00
		Charge Desc /Charge Manufacturer																		
		Phasing (°)	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	90.00	90.00	90.00	90.00	90.00	90.00
	_	Carr Size (in)	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375	3.375
		Carr Type /Stage No	EXP/																	
	-	Diamete r (in)	0.360	0.360	0.360	0.360	0.360	0.360 EXP/	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360 EXP/	0.360	0.360	0.360
	-	Misfires/ Add. Shot																		
		Shot Density (shot/ft)	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	4.00	4.00	4.00	4.00	4.00	4.00
		MD Base (usft)	8,303.0	8,315.0	8,327.0	8,355.0	8,439.0	8,475.0	8,501.0	8,561.0	8,601.0	8,637.0	8,667.0	8,679.0	8,715.0	8,734.0	8,749.0	8,867.0	8,899.0	8,948.0
	- 1	MD Top (usft)	8,302.0	8,314.0	8,326.0	8,354.0	8,438.0	8,474.0	8,500.0	8,560.0	8,600.0	8,636.0	8,666.0	8,678.0	8,714.0	8,733.0	8,748.0	8,866.0	8,898.0	8,947.0
		S (usft)																		
	Continue	CCL@																		
	Perforated Interval (Continued)		MESAVERDE/																	
		Date	7/15/2013 12:00AM																	

Plots က

August 20, 2013 at 11:08 am

OpenWells

				U	S ROCI	KIES R	EGION	
				Opera	tion S	umma	ary Report	
Well: NBU 1022-	-3P4BS GREEN						Spud Date: 4/2	1/2013
Project: UTAH-U	IINTAH		Site: NBL	J 1022-03	O PAD			Rig Name No: SWABBCO 6/6
Event: COMPLE	TION		Start Date	e: 7/10/20	113	T		End Date: 7/30/2013
Active Datum: R Level)	KB @5,297.00usft (above Mean S	ea	UWI: SV	V/SE/0/10)/S/22/E/	/3/0/0/26/PM/S/68	9/E/0/2070/0/0
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
6/24/2013	-	, , ,					, ,	
7/10/2013	8:00 - 9:00	1.00	SUBSPR	52	В	P		FILL SURFACE CSG. MIRU CAMERON QUICK TEST. PRESSURE TEST CSG & FRAC VALVES 1ST PSI TEST T/ 7000 PSI. HELD FOR 15 MIN LOST 45 PSI. NO COMMUNICATION OR MIGRATION WITH SURFACE CSG BLEED OFF PSI. PRESSURE TEST 8 5/8 X 4 1/2 TO 522 PSI HELD FOR 5 MIN LOST -171 PSI,BLED PSI OFF, REINSTALLED POP OFF SWIFN NO PRESSURE ON SURFACE CASING
7/12/2013	7:00 - 10:00	3.00	SUBSPR	37		Р		PILLED WITH 2 BBLS H2O PERF STG 1)PU 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. RIH PERFWELL, AS PER PERF DESIGN. POOH. SWIFW
7/15/2013	7:00 - 7:15	0.25	FRAC	48		Р		HSM-JSA
	7:15 - 18:00	10.75	FRAC	36	В	P		FRAC STG #1)WHP 1436 PSI, BRK 2347 PSI @ 4.8 BPM. ISIP 2625 PSI, FG. 0.74 ISIP 2605 PSI, FG. 0.73, NPI -20 PSI. X/O TO WL. SET CBP & PERF STG #2 AS DESIGNED, X/O TO FRAC. FRAC STG #2)WHP 2318 PSI, BRK 4920 PSI @ 3.6 BPM. ISIP 2614 PSI, FG. 0.74 ISIP 2684 PSI, FG. 0.75, NPI 70 PSI. X/O TO WL. SET CBP & PERF STG #3 AS DESIGNED, X/O TO FRAC. FRAC STG #3)WHP 1445 PSI, BRK 3255 PSI @ 4.6 BPM. ISIP 1921 PSI, FG. 0.67 ISIP 2342 PSI, FG. 0.72, NPI 421 PSI, X/O TO WL. SET CBP & PERF STG #4 AS DESIGNED.
7/16/2013	7:00 - 7:15	0.25	FRAC	48		Р		SWIFN HSM-JSA
7710/2013	7.00 - 7.15	0.20	TIVAC	40		F		I IOIVI-UUA

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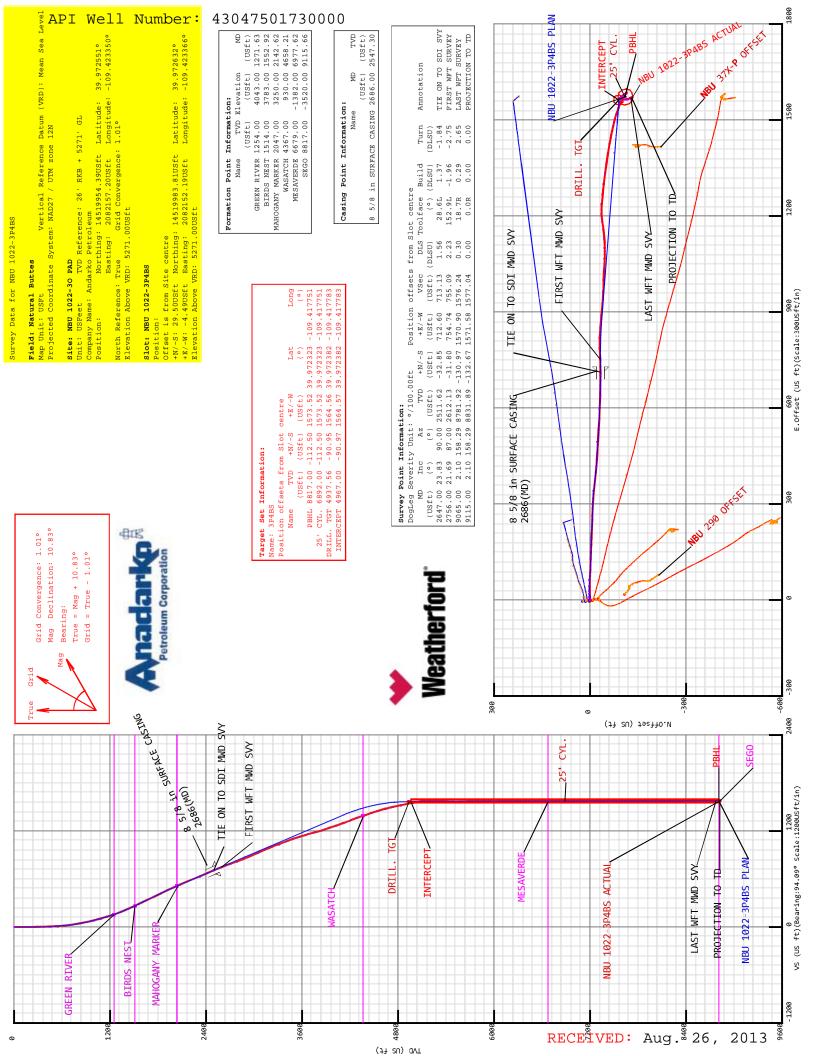
API Well Number: 43047501730000 US ROCKIES REGION **Operation Summary Report** Well: NBU 1022-3P4BS GREEN Spud Date: 4/21/2013 Project: UTAH-UINTAH Site: NBU 1022-03O PAD Rig Name No: SWABBCO 6/6 **Event: COMPLETION** End Date: 7/30/2013 Start Date: 7/10/2013 UWI: SW/SE/0/10/S/22/E/3/0/0/26/PM/S/689/E/0/2070/0/0 Active Datum: RKB @5,297.00usft (above Mean Sea Date P/U Time Duration Phase Code Sub MD From Operation Start-End Code (usft) (hr) 7:15 - 17:30 10.25 **FRAC** 36 Ρ В FRAC STG #4)WHP 1620 PSI, BRK 3098 PSI @ 4.7 BPM. ISIP 1915 PSI, FG. 0.68 ISIP 2326 PSI, FG. 0.73, NPI 411 PSI, X/O TO WL. SET CBP & PERF STG #5 AS DESIGNED, X/O TO FRAC. FRAC STG #5)WHP 1295 PSI, BRK 2685 PSI @ 4.4 BPM. ISIP 1566 PSI, FG. 0.64 ISIP 2487 PSI, FG. 0.76, NPI 921 PSI, X/O TO WL. SET CBP & PERF STG #6 AS DESIGNED SWIFN. 7/17/2013 - 7:00 0.25 **FRAC** 48 HSM, KEEPING AN EYE OUT FOR HEAT RELATED STRESS 7:00 - 14:00 7.00 **FRAC** Ρ 36 В FRAC STG #6] WHP=423#, BRK DN PERFS=2,616#, @=4.7 BPM, INTIAL ISIP=1,266#, FG=.61, FINAL ISIP=1,589#, FG=.66, SET PLUG AND PERFORATE STG #7 FRAC STG #7] WHP=358#, BRK DN PERFS=2,398#, @=4.9 BPM, INTIAL ISIP=1,387#, FG=.65, FINAL ISIP=2,379#, FG=.79, SET PLUUG AND PERFORATE STG #8 FRAC STG #8] WHP=1,736#, BRK DN PERFS=2,069#, @=6.8 BPM, INTIAL ISIP=1,715#, FG=.71, FINAL ISIP=1,816#, FG=.73, SET PLUG AND PERFORATE STG #9 SWIFN 7/18/2013 6:45 - 7:00 Р HSM, RIGGING DOWN / PINCH POINTS 0.25 FRAC 48 7:00 - 7:00 Р 0.00 **FRAC** 36 В FRAC STG #9] WHP=1,009#, BRK DN PERFS=2,097#, @=4.1 BPM, INTIAL ISIP=1,313#, FG=.65, FINAL ISIP=1,546#, FG=.69, SET PLUG AND PERFORATE STG #10 FRAC STG #10] WHP=162#, BRK DN PERFS=2,030#, @=4.6 BPM, INTIAL ISIP=1,28#, FG=.65, FINAL ISIP=1,623#, FG=.71, SET TOP KILL TOTAL BBLS=11,585 TOTAL SAND=271,744# 7/29/2013 7:00 - 7:30 0.50 DRLOUT 48 7:30 - 15:00 Р 7.50 DRLOUT 31 DRIVE RIG IN TO LOC. RIG UP, NDWH, NUBOPS, TIH 183 JTS.5756', RIG UP PWR SWIVEL, BREAK CIRC, PRESURE TEST CSG.TEST BOP'S, 3000#, SWIFN 7/30/2013 7:00 - 7:30 0.50 **DRLOUT** 48 Ρ **PSI LINES**

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				U	3 RUC	KIES RE	GION	
				Opera	tion S	Summa	ry Report	
Vell: NBU 1022	2-3P4BS GREEN						Spud Date: 4/2	21/2013
roject: UTAH-L	JINTAH		Site: NBU	1022-03	O PAD			Rig Name No: SWABBCO 6/6
Event: COMPLE	ETION		Start Date	e: 7/10/20	013			End Date: 7/30/2013
Active Datum: R	RKB @5,297.00usft (ab	oove Mean S				0/S/22/E/3	/0/0/26/PM/S/68	39/E/0/2070/0/0
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	7:30 - 19:21	11.85	DRLOUT	44	C	P		MILL 10 PLUGS, 8697', 275 JTS, TIH TO 9051' 287 JTS, C/O 30' SAND, POOH TO 267 JTS, 8451.25', LAND TBG, ND BOP'S, NUWH, PUMP 30 GAL SCALE INHIB, DISPLACE WITH 35 BBLS T-MAC, POBS, 2500#, TEST FLOW LINE TO 3000#, RDMO PLUG# 1 5756' 5' SAND 25 MIN 0# KICK PLUG# 2 6048' 25' SAND 10 MIN 50# KICK PLUG# 3 6260' 35' SAND 8 MIN 40# KICK PLUG# 4 6543' 30' SAND 10 MIN 50# KICK PLUG# 5 6796' 45' SAND 8 MIN 50# KICK PLUG# 6 7368' 30' SAND 9 MIN 100# KICK PLUG# 7 7765' 50' SAND 10 MIN 150# KICK PLUG# 8 8176' 35 SAND 9 MIN 100# KICK PLUG# 9 8459' 25' SAND 15 MIN 150# KICK PLUG# 10 8697' 30' SAND 15 MIN 100# KICK PLUG# 10 8697' 30' SAND 15 MIN 100# KICK PLUG# 10 8697' 30' SAND 15 MIN 100# KICK PLUG# 10 8697' 30' SAND 15 MIN 100# KICK PLUG# 10 8697' 30' SAND 15 MIN 100# KICK PLUG# 10 8697' 30' SAND 15 MIN 100# KICK PLUG# 10 8697' 30' SAND 15 MIN 100# KICK PLUG# 10 8697' 30' SAND 15 MIN 100# KICK PBTD 9051' BTM PERF 8948' TBG 150 JTS J-55 4723.60' BTM TBG 117 JTS L-80 3698.62' TOP KB 26.00' HANGER 4.125" .83' SN 1.875" 2.20' EOT 8451.25' NOTE: SHORT JT @ 3740.61' FRAC WTR 11,585 BBLS RCVD 2,500 BBLS LTR 9,085 BBLS
	19:21 - 19:21	0.00	DRLOUT	50				LTR 9,085 BBLS WELL TURNED TO SALES @ 3:30 HR ON 7/30/2013. 3550 MCFD, 1920 BWPD, FCP 2714#, FTP 1650#, 18/64" CK.

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RECEIVED: Aug. 26, 2013



FINAL SURVEYS



5D Survey Report

Andarko Petroleum

NBU 1022-30 PAD Natural Buttes Field Name: Site Name:

Well Name:

Survey:

NBU 1022-3P4BS Definitive Survey Weatherford

5D 7.5.4 : 23 May 2013, 15:59:14 UTC

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Weatherford

5D Survey Report



Surveys for the NBU 1022-3P4BS

Convergence Angle: 1.01	Latitude: 39.972551	Longitude: -109.423350				
North Reference: True	Northing: 14519954.39 US ft	Easting: 2082157.20 USft	+ 5271' GL			
Units: USft	:	Position	Site TVD Reference: 26' RKB + 5271' GL	Elevation above:5271.00 US ft	Comment:	ı
		Site Name	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	UPD 1022-301 PAN		

		Position (Off	Position (Offsets relative to Site Centre)	Site Centre)
	+N / -S: 29.50 US ft	Northing:14519983.81 USft		Latitude: 39.972632
Slot Name	+E / -W: -4.49 US ft	Easting:2082152.19 USft		Longitude: -109.423366
29896 000 + 11918	Slot TVD Reference: Ground Elevation	d Elevation		
NDO 1022-384D3	Elevation above : 5271.00 US 1	SA		
	Comment:			
	Type: Main well	ם	UWI:	
	Rig Height <i>Drill Floor</i> : 26.00 US ft Relative to: 5297.00 US ft		Comment :	
Well Name				

	Company :		Dip: 65.79°
			Declination: 10.83°
	Comment :		Field Strength: 52103.4 nT
urvey	Survey Tool :		Date: 24/Apr/2013
Survey Name :Definitive Survey	Date: 24/Apr/2013	Magnetic Model	Model Name: BGGM

Az:94.09°

+E / -W: 0.00 US ft

Vertical Section (Position of Origin Relative to Slot)

Closure Distance: 1577.17 US ft

NBU 1022-3P4BS

+N / -S: 0.00 US ft

Closure Azimuth: 94.8253°

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07

5D Survey Report

Survey Tool Ranges	anges										
	Name		St	Start MD (usft)		End MI	End MD (us ft)		Source	Source Survey	
	MWE			00.0		264	2647.00		SURFAC	SURFACE MWD	
	MWE			2647.00		911	9115.00		WFT MW	WFT MWD SURVEY	
Well path created using minimum curvature	sing minimum cu	vature									
Survey Points (Relative to		centre, TVD relative to Drill Floor)	Drill Floor)								
ME (US ft)		Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	Latitude (°)	Longitude (°)	DLS (°/100 US ft)	CL (US ft.)	VS (US ft)	Comment
0.00	0.00	0.00	0.00	0.00	0.00	39.972632	-109.423366	0.00	0.00	-0.00	
22.00	0.00	0.00	22.00	0.00	0.00	39.972632	-109.423366	0.00	22.00	-0.00	
26.00	0.00	0.00	26.00	0.00	000	39.972632	-109.423366	0.00	4.00	-0.00	
175.00	0.35	152.05	175.00	-0.40	0.21	39.972631	-109.423365	0.23	149.00	0.24	
203.00	0.70	173.23	203.00	-0.65	0.27	39.972630	-109.423365	1.41	28.00	0.32	
291.00	0.70	77.34	290.99	-1.06	98.0	39.972629	-109.423363	1.18	88.00	0.94	
378.00	1.49	82.00	377.98	-0.79	2.50	39.972630	-109.423357	0.91	87.00	2.55	
468.00	2.81	82.61	467.91	-0.34	5.85	39.972631	-109.423345	1.47	00.06	5.86	
558.00	4.40	85.16	557.73	0.23	11.47	39.972633	-109.423325	1.78	90.00	11.43	
648.00	5.98	87.18	647.36	0.75	19.60	39.972634	-109.423296	1.77	90.00	19.49	
738.00	8.00	88.77	736.69	1.12	30.54	39.972635	-109.423257	2.25	00.06	30.39	
828.00	10.44	91.87	825.52	0.99	44.96	39.972635	-109.423206	2.77	00.06	44.77	
918.00	12.40	91.93	913.73	0.40	62.77	39.972633	-109.423142	2.18	90.00	62.58	
1008.00	13.93	93.49	1001.36	-0.59	83.24	39.972630	-109.423069	1.75	90.00	83.07	
1098.00	16.00	91.84	1088.31	-1.65	106.45	39.972627	-109.422986	2.35	90.00	106.30	
1188.00	17.32	92.19	1174.53	-2.56	132.24	39.972625	-109.422894	1.47	90.00	132.08	
1278.00	19.08	92.02	1260.02	-3.59	160.33	39.972622	-109.422794	1.96	90.00	160.17	
1368.00	21.40	92.69	1344.46	-4.88	191.43	39.972619	-109.422683	2.59	90.00	191.29	
1458.00	23.65	92.28	1427.59	-6.37	225.88	39.972615	-109.422560	2.51	00.06	225.75	
1548.00	25.15	91.93	1509.55	-7.73	263.03	39.972611	-109.422427	1.67	00.06	262.91	
1638.00	26.82	92.55	1590.44	-9.28	302.43	39.972607	-109.422287	1.88	00.06	302.32	
1728.00	24.54	95.66	1671.55	-12.02	341.32	39.972599	-109.422148	2.94	90.00	341.31	
1818.00	25.15	96.76	1753.22	-16.12	378.91	39.972588	-109.422014	0.85	00.06	379.09	
1908.00	26.82	94.83	1834.12	-20.08	418.14	39.972577	-109.421874	2.08	90.00	418.50	
1998.00	25.15	93.51	1915.02	-22.96	457.46	39.972569	-109.421734	1.96	90.00	457.93	
2088.00	23.83	92.63	1996.93	-24.96	494.71	39.972563	-109.421601	1.52	00.06	495.23	
2178.00	22.86	93.42	2079.56	-26.84	530.32	39.972558	-109.421474	1.13	90.00	530.89	
2268.00	22.60	93.69	2162.57	-29.00	565.03	39.972552	-109.421350	0.31	90.00	565.66	
2358.00	23.09	92.08	2245.51	-30.75	599.93	39.972548	-109.421225	0.88	90.00	69.009	
2448.00	22.51	91.23	2328.48	-31.76	634.79	39.972545	-109.421101	0.74	90.00	635.44	
2538.00	22.86	96.06	2411.51	-32.42	669.49	39.972543	-109.420977	0.41	90.00	670.10	
2628.00	23.57	90.35	2494.23	-32.83	704.96	39.972542	-109.420850	0.83	90.00	705.51	
2647.00	23.83	90.00	2511.62	-32.85	712.60	39.972542	-109.420823	1.56	19.00	713.13	TIE ON TO SDI MWD SVY

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5D 7.5.4: 23 May 2013, 15:59:14 UTC

5D Survey Report

MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft.)	E.Offset (US ft)	Latitude (°)	Longitude (°)	DIS (*/100 US ft)	CL (US.ft.)	(ay sn.) NS	Comment
2756.00	21.69	87.00	2612.13	-31.80	754.74	39.972545	-109.420673	2.23	109.00	755.09	FIRST WHT MWD SVY
2851.00	19.52	88.63	2701.05	-30.50	788.14	39.972548	-109.420554	2.36	95.00	788.31	
2945.00	19.57	91.91	2789.64	-30.65	819.58	39.972548	-109.420441	1.17	94.00	819.68	
3040.00	21.60	95.15	2878.57	-32.75	852.90	39.972542	-109.420322	2.45	95.00	853.06	
3134.00	23.35	95.11	2965.43	-35.96	69.888	39.972533	-109.420195	1.86	94.00	888.99	
3229.00	24.07	94.42	3052.41	-39.13	926.76	39.972525	-109.420059	0.81	95.00	927.19	
3323.00	24.04	93.02	3138.25	-41.61	964.99	39.972518	-109.419922	0.61	94.00	965.50	
3417.00	20.86	90.81	3225.11	-42.86	1000.85	39.972514	-109.419795	3.50	94.00	1001.36	
3512.00	21.01	94.16	3313.84	-44.34	1034.75	39.972510	-109.419674	1.27	95.00	1035.28	
3606.00	21.45	92.18	3401.47	-46.21	1068.73	39.972505	-109.419552	0.89	94.00	1069.31	
3700.00	18.59	88.77	3489.78	-46.54	1100.90	39.972504	-109,419438	3.29	94.00	1101.41	
3795.00	17.54	84.84	3580.10	-44.93	1130.30	39.972509	-109.419333	1.69	95.00	1130.62	
3890.00	16.14	82.74	3671.02	-41.97	1157.65	39.972517	-109.419235	1.61	95.00	1157.70	
3984.00	15.18	82.05	3761.53	-38.62	1182.80	39.972526	-109.419145	1.04	94.00	1182.55	
4078.00	17.47	87.59	3851.74	-36.33	1209.09	39.972532	-109.419051	2.94	94.00	1208.61	
4173.00	18.26	95.93	3942.18	-37.26	1238.15	39.972530	-109.418948	2.82	95.00	1237.65	
4267.00	19.11	94.36	4031.22	-39.95	1268.14	39.972522	-109.418841	1.05	94.00	1267.76	
4362.00	20.93	97.54	4120.48	-43.36	1300.47	39.972513	-109.418725	2.23	95.00	1300.25	
4456.00	20.31	97.45	4208.46	-47.68	1333.29	39.972501	-109.418608	99.0	94.00	1333.30	
4549.00	20.10	92.36	4295.73	-51.82	1365.15	39.972490	-109.418495	0.23	93.00	1365.36	
4643.00	19.03	99.34	4384.31	-56.38	1396.29	39.972477	-109.418383	1.34	94.00	1396.75	
4737.00	18.25	99.57	4473.38	-61.31	1425.92	39.972464	-109.418278	0.83	94.00	1426.66	
4832.00	17.06	102.20	4563.90	-66.73	1454.21	39.972449	-109.418177	1.51	95.00	1455.27	
4926.00	14.69	102.57	4654.31	-72.24	1479.33	39.972434	-109.418087	2.52	94.00	1480.71	
5021.00	13.25	105.82	4746.50	-77.83	1501.56	39.972418	-109.418008	1.73	95.00	1503.29	
5115.00	12.13	107.32	4838.20	-83.71	1521.35	39.972402	-109.417937	1.24	94.00	1523.45	
5210.00	10.94	111.32	4931.28	96.68-	1539.28	39.972385	-109,417873	1.51	95.00	1541.78	
5304.00	9.13	112.32	5023.84	-96.03	1554.49	39.972368	-109,417819	1.93	94.00	1557.38	
5398.00	7.57	116.73	5116.84	-101.65	1566.92	39.972353	-109.417775	1.79	94.00	1570.18	
5493.00	5.38	123.70	5211.23	-106.94	1576.22	39.972338	-109.417741	2.45	95.00	1579.83	
5587.00	3.50	128.57	5304.95	-111.17	1582.13	39.972327	-109.417720	2.04	94.00	1586.03	
5682.00	1.63	137.07	5399.85	-113.97	1585.31	39.972319	-109,417709	2.00	95.00	1589.40	
5776.00	0.38	133.82	5493.83	-115.16	1586.45	39.972316	-109.417705	1.33	94.00	1590.62	
5871.00	1.25	306.15	5588.82	-114.77	1585.84	39.972317	-109.417707	1.71	95.00	1589.99	
5965.00	0.81	274.68	5682.81	-114.11	1584.35	39.972319	-109.417712	0.75	94.00	1588.45	
00.0909	69.0	246.56	5777.80	-114.28	1583.16	39.972318	-109.417717	0.40	95.00	1587.27	
6154.00	0.74	230.59	5871.79	-114.89	1582.17	39.972316	-109.417720	0.22	94.00	1586.33	
6249.00	99.0	41.59	5966.79	-114.87	1582.06	39.972316	-109.417721	1.47	95.00	1586.22	
6343.00	1.52	354.38	82.0909	-113.23	1582.29	39.972321	-109.417720	1.25	94.00	1586.34	
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5D 7.5.4: 23 May 2013, 15:59:14 UTC

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cen	centre, TVD relative to Drill Floor)	Drill Floor)								
Az (°)		TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	Latitude (°)	Longitude (°)	DLS (*/100 US ft)	CL (US ft)	(14 SU)	Comment
327.35		6249.63	-106.80	1579.11	39.972339	-109.417731	0.16	94.00	1582.71	
323.19		6344.56	-103.78	1577.02	39.972347	-109.417738	0.38	95.00	1580.41	
319.98		6438.51	-101.37	1575.13	39.972354	-109,417745	0.42	94.00	1578.35	
316.44		6533.48	-99.47	1573.44	39.972359	-109.417751	0.33	95.00	1576.53	
312.05		6627.46	-98.05	1572.00	39.972363	-109.417756	0.32	94.00	1574.99	
312.70		6721.44	-96.90	1570.73	39.972366	-109.417761	0.10	94.00	1573.64	
316.07		6816.43	-95.81	1569.62	39.972369	-109,417765	0.14	95.00	1572.45	
323.20		6910.42	-94.88	1568.81	39.972371	-109.417768	0.28	94.00	1571.58	
321.82		7004.42	-94.14	1568.24	39.972373	-109.417770	0.14	94.00	1570.96	
266.32		7099.41	-93.84	1567.67	39.972374	-109.417772	0.45	95.00	1570.37	
210.70		7193.41	-94.30	1567.10	39.972373	-109.417774	0.55	94.00	1569.83	
214.57		7288.40	-95.43	1566.36	39.972370	-109.417777	0.39	95.00	1569.18	
212.57		7382.38	68.96-	1565.40	39.972366	-109,417780	0.14	94.00	1568.32	
199.57		7477.37	-98.56	1564.58	39.972361	-109,417783	0.27	95.00	1567.62	
189.82		7571.35	-100.35	1564.11	39.972356	-109.417785	0.20	94.00	1567.28	
178.94		7666.33	-102.31	1563.97	39.972351	-109.417785	0.27	95.00	1567.28	
180.12		7760.30	-104.46	1563.99	39.972345	-109.417785	0.14	94.00	1567.45	
171.30		7855.27	-106.85	1564.17	39.972339	-109.417784	0.28	95.00	1567.81	
178.32		7949.24	-109.22	1564.40	39.972332	-109.417784	0.24	94.00	1568.20	
181.82		8044.21	-111.50	1564.39	39.972326	-109.417784	0.09	95.00	1568.36	
174.82		8138.19	-113.86	1564.47	39.972319	-109.417783	0.23	94.00	1568.60	
169.95		8233.15	-116.53	1564.83	39.972312	-109.417782	0.30	95.00	1569.16	
158.25		8327.11	-119.04	1565.52	39.972305	-109.417780	0.47	94.00	1570.03	
155.45		8421.08	-121.27	1566.48	39.972299	-109.417776	0.09	94.00	1571.14	
153.73		8610.01	-125.88	1568.67	39.972286	-109.417768	90.0	189.00	1573.66	
158.29		8781.92	-130.97	1570.90	39.972272	-109.417760	0:30	172.00	1576.24	LAST WFT MWD SVY
158.29		8831.89	-132.67	1571.58	39.972268	-109.417758	0.00	20.00	1577.04	PROJECTION TC TD

5D Survey Report